

# FLORIDA STATE UNIVERSITY

## HOFFMAN (KATHERINE B) TEACH LAB

ASSET NUMBER: 0035

FACILITY CONDITION ANALYSIS

RE-INSPECTION DATE: MAY 10, 2012





FLORIDA STATE UNIVERSITY  
Facility Condition Analysis

---

**TABLE OF CONTENTS**

**SECTION 1: GENERAL ASSET INFORMATION**

A. Asset Executive Summary .....	1.1.1
B. Asset Summary.....	1.2.1
C. Backlog Retirement Summary - All .....	1.3.1
Backlog Retirement Summary - Completed .....	1.4.1
D. Inspection Team Data .....	1.5.1
E. Facility Condition Analysis - Definitions .....	1.6.1
1. Material and Labor Cost Factors and Additional Markups .....	1.6.1
2. Facility Condition Needs Index .....	1.6.1
3. Project Number .....	1.6.1
4. Project Classification.....	1.6.2
5. Priority Class .....	1.6.2
6. Category Code .....	1.6.3
7. Priority Sequence by Priority Class .....	1.6.3
8. Project Subclass Type .....	1.6.3
9. Drawings / Project Locations .....	1.6.4
10. Life Cycle Cost Model Description and Definitions .....	1.6.4
11. Photo Number .....	1.6.4
F. Category Code Report.....	1.7.1

**SECTION 2: DETAILED PROJECT SUMMARIES AND TOTALS**

A. Detailed Project Totals – Matrix with FCNI Data and Associated Charts .....	2.1.1
B. Detailed Projects by Priority Class / Priority Sequence .....	2.2.1
C. Detailed Projects by Project Classification.....	2.3.1
D. Detailed Projects by Project Subclass - Energy Conservation .....	2.4.1
E. Detailed Projects by Category / System Code .....	2.5.1

**SECTION 3: SPECIFIC PROJECT DETAILS ILLUSTRATING DESCRIPTION / COST .....**3.1.1

**SECTION 4: DRAWINGS / PROJECT LOCATIONS**

**SECTION 5: LIFE CYCLE MODEL SUMMARY AND PROJECTIONS**

A. Building Component Summary .....	5.1.1
B. Expenditure Projections.....	5.2.1

**SECTION 6: PHOTOGRAPHIC LOG .....**6.1.1



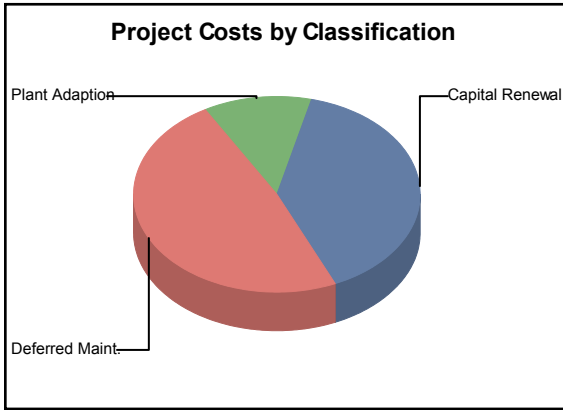
# FACILITY CONDITION ANALYSIS

## SECTION 1

### GENERAL ASSET INFORMATION



### EXECUTIVE SUMMARY - HOFFMAN (KATHERINE B) TEACH LAB

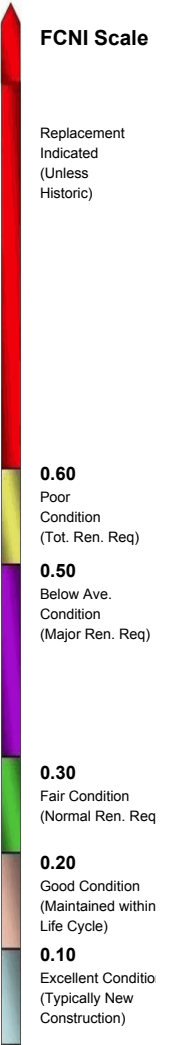


**Building Code:** 0035  
**Building Name:** HOFFMAN (KATHERINE B) TEACH LAB  
**Year Built:** 1969  
**Building Use:** Lab  
**Square Feet:** 79,365

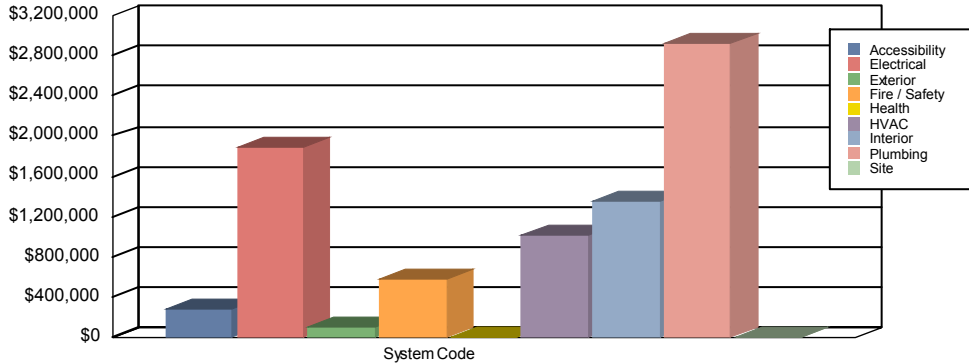
**Project Costs by Priority**

Priority 1:	\$0
Priority 2:	\$784,486
Priority 3:	\$7,060,714
Priority 4:	\$328,482
Priority 5:	\$0
<b>Total Project Costs:</b>	<b>\$8,173,682</b>
<b>Current Replacement Value:</b>	<b>\$38,327,788</b>

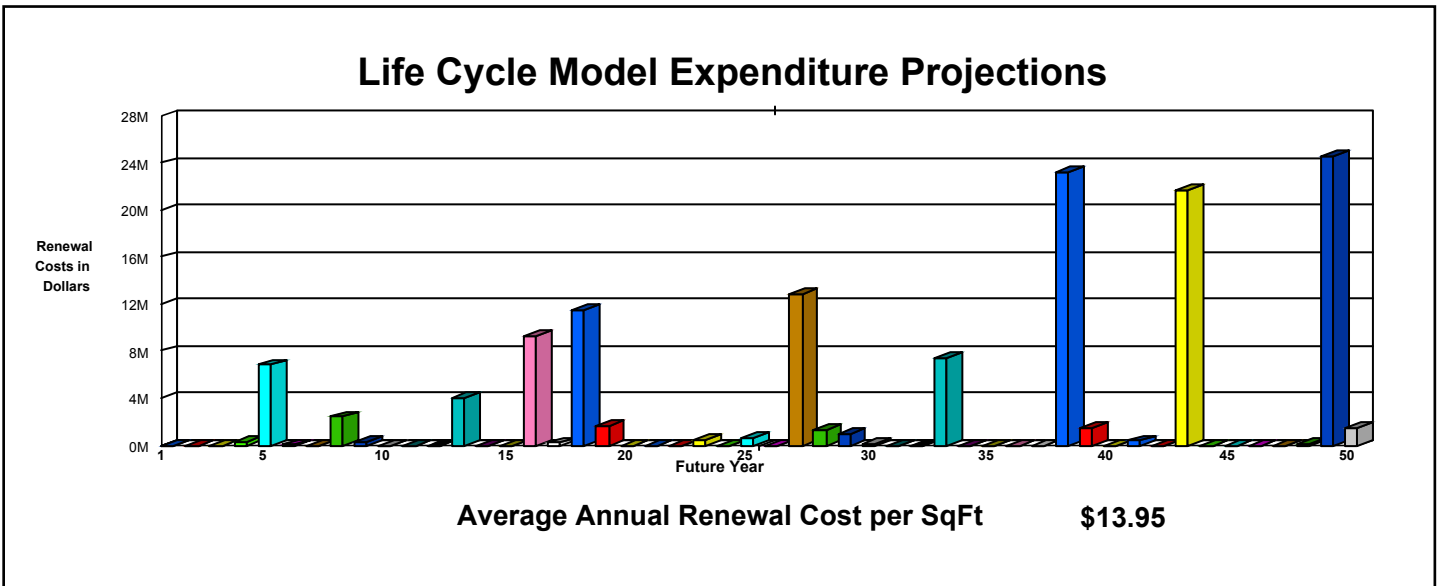
**Facility Condition Needs Index (FCNI): 0.21**  
 (Project Costs / Replacement Cost)



### Project Costs by System Code



### Life Cycle Model Expenditure Projections







## ADMINISTRATIVE OVERVIEW

This analysis is intended to update the initial Facility Condition Analysis prepared for Hoffman (Katherine B) Teach Lab. The facility was reinspected by ISES Corporation personnel to determine the number of previously recommended projects which had been completed and to ascertain the extent of new damage to the facility since the original inspection. This document is a reproduction of the original report information updated for subsequent damage, inflation, and new legislative requirements. Previously estimated project costs have been inflated based upon construction cost information published in Engineering News Record. Deficiencies which have been corrected since the original inspection have been eliminated from this report. New deficiencies observed during the reinspection have been incorporated into this report by either editing existing projects or adding new ones. Edited projects are identified by the addition of "(REV 5/12)" to the project title. New projects are indicated by the addition of "(5/12)" at the end of the title.

### B. ASSET SUMMARY

The Hoffman (Katherine B) Teaching Laboratory, named after Katherine "Kitty" B. Hoffman, the University's last Dean of Women, is located on the Florida State University campus in Tallahassee, Florida. It was built in 1969, with overall building space of 79,365 square feet. The Hoffman Teaching Laboratory is a five-story, concrete and brick masonry structure. The learning spaces are primarily research laboratories and classrooms.

#### SITE

The concrete paths and decorative, brick-paved courtyard areas are well maintained and in good condition. A variety of trees, including oak trees with Spanish moss, and shrubs are planted in and around the central courtyard, which is well landscaped. Decorative lampposts line the walkways of this facility and the courtyard.

Parking areas are tarred, with striping that designates handicapped-accessible parking, as well as faculty and staff parking. This parking area is shared with the Biomedical Research Facility. The asphalt pavement surface for the parking lot is in fair condition. There is a concrete loading dock located at the facility's west side, lower level.

#### EXTERIOR STRUCTURE

The Hoffman Teaching Laboratory is constructed of poured and precast concrete, with brick masonry surfaces. Structurally, this 1969 facility is generally in fair condition for its age. The exterior surfaces are stained, detracting from the aesthetic value of this facility. Some areas will need brick pointing, mortar repair, and / or construction joint caulking to restore weather protection. This work is selective, so matching mortar should be applied. Following a detailed examination of the brick and repair of mortar construction joints, the entire building should be pressure washed to remove soil and stains. If moisture is penetrating the masonry facade, it is recommended that a spray sealant be applied directly onto the exterior masonry surface. The existing roofing system is a roll asphalt application installed in 2010 along with new flashing and is in good.

The brick grating that encloses the hallways outside of the rooms of the upper three levels protects the students and building, especially from hurricanes. The exterior metal entry doors with glass frame inserts remain in serviceable condition. For the most part, there are no windows in this facility.

#### INTERIOR FINISHES / SYSTEMS

The interior wall finishes are primarily painted concrete block, with painted sheetrock partitions throughout all levels of the facility. The interior finishes are in good to fair condition and will require an almost continuous program of renewal to maintain an acceptable interior appearance. Cyclical painting should be continued as part of routine maintenance. The interior painted corridor and metal stair tower doors remain in good condition.

The ceiling systems throughout the facility are 2 x 2 foot, suspended, acoustical ceiling tiles. The ceilings in this structure are in overall good condition, and most do not currently need to be upgraded. However, there are isolated areas where the ceiling tiles are deteriorated and water-stained. Over the next ten years, almost half of these tiles will need to be replaced. To improve the general appearance of these spaces, it is recommended that the ceilings be upgraded on a low priority basis.

The interior floor finishes vary in application and condition from area to area and floor to floor, with some upgrades made within the last three years. The enclosed perimeter walkways are unfinished concrete, the interior laboratory is predominantly vinyl tile, and the offices are carpeted. Carpet installations in facilities with similar traffic patterns tend to reach the end of their useful service life in seven to ten years, and should then be replaced. Typically, the carpet in this facility is in good overall condition. Universal carpet replacement, however, is warranted within the next ten years.

An estimated third of the vinyl tile flooring has been replaced. The aged vinyl floor tile, as well as the 9 x 9 inch tile suspected of containing asbestos, should be replaced. Much of the tile has a dated appearance. As interior enhancement upgrades are being recommended, room renovations should include a universal tile replacement with a modern design vinyl tile. The concrete floors have undergone little maintenance since original construction. Clean the concrete floor areas, and reseal the surface to eliminate spill penetration and dusting. Maintenance areas with painted safety designations on the floor should have safety painting reapplied after cleaning and resealing.

The laboratory casework and countertops vary in design, age, and degree of deterioration within floors and suites. Continuous contact with corrosive chemicals, reagents, and abrasives accelerates the wear of this furniture. Selective replacement of both base cabinets and countertops should be anticipated within ten years. Approximately 60 percent of the lab cabinetry and countertops are recommended for replacement. The new cabinetry is to be designed in accordance with current accessibility requirements, and should include utility upgrades.

#### ACCESSIBILITY

There is designated handicapped parking at the northwest parking lot adjacent to this facility. A handicapped concrete access ramp is present at the northeast main entrance, with handrails present on one side. There is a single elevator serving all levels of this building. This elevator has hands-free phone access, which is located in the elevator control panel.

Current ADA legislation requires that interior stairs have handrails that are on both sides, are continuous through the stair landings, have specific end geometry, and are graspable. With some exceptions, this building has not been fitted with accessible handrails, and the existing guardrails are typically non-compliant. Local codes now require that guardrail systems prevent the passage of a 4 inch diameter sphere and be at least 42 inches high. An extensive number of additional interior and exterior handrails / guardrails are needed to meet current ADA and fire / life safety standards. It is recommended that all handrails be upgraded with the addition of rail extensions and be continuous throughout the landings at both sides of the stairs. The guardrails should also be properly infilled to reduce the potential for injury.

Although some attempt has been made to improve accessibility, the restrooms are not fully ADA compliant. The first and fifth floors have handicapped-accessible restrooms. The second and third floors do not have restrooms, and the fourth floor restrooms are not ADA compliant. To comply with current legislation, upgrades to the restrooms on the fourth floor are recommended. Modify these facilities to create accessible restrooms for both men and women. This effort includes providing adequate turning radius and compliant clearances, as well as code-compliant fixtures, hardware, and accessories. In addition, install power-assisted restroom door openers at all restrooms to facilitate handicapped access.

Except for the updated classrooms on the first and second floors, this building generally lacks code-compliant lever door hardware. To meet these requirements, replace existing knob hardware with code-compliant levers. Doors leading into spaces typically off-limits to the general public or into dangerous areas, such as mechanical or electrical rooms, should have levers with knurled handles.

ADA legislation has established signage requirements for all permanent spaces in a building. Few if any of the signs in this building conform to these criteria. To comply with this legislation, it is recommended that all non-compliant signage be removed and replaced with signs conforming to ADA standards. The new signs should be mounted in the correct location and should contain such code-required elements as Braille, pictograms, and high-contrast, raised lettering.

Accessibility legislation also requires that building amenities be generally accessible to all persons. The existing single-level drinking fountains accommodate neither wheelchair-bound persons nor those who have difficulty stooping. It is recommended that one of the single-level fountains on floors one, two, four, and five be replaced or furnished with a compliant, dual-level, refrigerated unit.

## HEALTH

Chemical inventories in labs should be maintained and stored according to Environmental Health & Safety guidelines. This campus has developed a department of Environmental Health & Safety that offers safety-related services, and employs safety-trained personnel.

Since building construction in 1969, applied interior paint finishes have been maintained, and therefore, the threat of lead paint appears minimal. All adhered 9 x 9 flooring material and plumbing insulation was securely installed at the time of the survey and did not pose a concern for asbestos abatement. However, confirmed asbestos materials should be handled and disposed of according to all applicable federal, state, and local rules and regulations. Abatement costs are included in the recommendations for the affected systems.

Room 407 is an environmental box with a split DX refrigeration system. This refrigeration system is past its life cycle and should be replaced, including the compressor, evaporator unit, and controls, with a new system that utilizes the latest CFC and HCFC-free refrigerant.

## FIRE / LIFE SAFETY

Due to the nature of this facility and its contents, it is recommended that laboratories and offices be kept locked if unoccupied. Metal fire-rated safety doors and doorframes are installed throughout this facility. There appears to be a sufficient number of properly located emergency exits.

The fire alarm system is a Simplex 4020 system. This is a modern addressable point system that is in good condition and appears to be in compliance with ADA and local codes. No upgrades are necessary at this time.

There is no automatic fire suppression system. A building of this size and use should be protected throughout. Install an automatic fire sprinkler system throughout the facility, to include piping, valves, sprinkler heads, and piping supports. Install flow switches and sensors that interface with the fire alarm system. This installation will reduce overall liability and risk of loss.

The emergency egress lighting and exit signs are in good condition, acceptable in number, and properly placed. No upgrades are proposed at this time beyond the upgrade to the emergency generator detailed in the Electrical section of this report.

## HVAC

This building is supplied with central chilled water and central steam. Much of the HVAC system was upgraded in 2004 and is in good condition. The system features rooftop and interior air handlers with steam, hot water, and chilled water coils, heat recovery, variable frequency drives, and a direct digital control (DDC) system. A new air handler was installed in 2011 to serve the second floor classroom. An original air handler was noted on the fourth floor. There are timeworn centrifugal exhausters on the roof. The old air handling system and exhaust systems are recommended for replacement based on life cycle depletion.

There are numerous fume hoods in this laboratory facility. Most of the strobic exhaust fans and fume hoods located on the fifth and third floors were installed in 2004. They are in good condition. Original fume hoods were noted on the fourth floor. These are in a deteriorated state and past due for replacement. Coordinate this action with other proposed HVAC upgrades.

## ELECTRICAL

The main switchgear is rated at 277/480 volts and has a 2,500 amp breaker. There is a 500 kVA, step-down transformer that provides 120/208 volts to 1,200 amp switchgear. This is an original switchgear manufactured by General Electric. It has exceeded its life cycle and is due for replacement.

Much of the electrical system is original, with some upgrades made during past renovations. There are original GE power panels and original devices, including switches and receptacles that are uniformly timeworn. In addition, standard receptacles are present in wet areas where ground fault circuit interrupter (GFCI) receptacles are needed to prevent shock hazards. An upgrade of the building electrical system is recommended. Lightning arrestor systems have been installed on the roof of this facility.

The interior lighting includes open-tube, parabolic fixtures with T8 fluorescent lamps. Select rooms are equipped with occupancy sensors. The lighting is generally in good condition and energy efficient. No upgrades for the interior lighting are needed at this time.

There are worn and damaged incandescent and HID exterior lights around the building perimeter. The incandescent fixtures should be replaced with more efficient compact fluorescent types, and the HID replaced fixtures with new efficient units.

A 10 kW, Kohler generator provides backup power for the building emergency circuit. This is original unit is past its life cycle and of inadequate capacity to meet the emergency power needs of a modern science teaching laboratory. It should be replaced with a system to provide emergency power for the life safety and specific non-essential loads. Loads considered to be life safety include egress lighting, exit signs, elevators, and fire alarm systems. Non-essential loads include HVAC equipment, refrigeration equipment, computer equipment, lab equipment, and the like. The cost estimate is based on a 100 kW, standby emergency unit.

## PLUMBING

This building features copper water supply piping, plastic and cast-iron drain lines, threaded steel natural gas lines, and other utility piping, such as vacuum and purified water. There are numerous plumbing fixtures typical of a teaching laboratory. Domestic hot water is produced by a tank-type steam-to-hot-water converter. With the exception of a few upgrades in renovated areas, the plumbing systems in this facility are original, aged, and in poor condition overall.

Demolish the existing water supply and drain piping networks, all aged plumbing fixtures, process piping systems, and domestic hot water heating equipment. Install a new, insulated copper water supply network, complete with backflow protection devices, pressure regulators, and appropriately placed isolation valves. Install new process piping systems and a new drain network with cast-iron piping for normal wastes and corrosion-resistant piping for acid wastes. Install new plumbing fixtures throughout, in coordination with proposed restroom upgrades detailed in the Accessibility section of this report. Install new domestic water heating equipment, appropriately sized to accommodate the demands of the new fixtures. Some pipe insulation was labeled as being asbestos containing material (ACM). Remove and disposed of all ACM in accordance with all pertinent regulations. Three formal estimates have been created to address these recommended plumbing upgrades.

The vacuum pump in the first floor mechanical room appears to be in good condition. The purified water equipment is maintained by an outside firm. There are two air compressors in the first floor mechanical room. The smaller air compressor is abandoned. The larger one is in operating condition, but is at life cycle depletion. Remove the two air compressors. Install a new laboratory-grade air compressor package, including dryer, all connections, and controls.

## VERTICAL TRANSPORTATION

Vertical transportation is served by a five-stop, ThyssenKrupp, hydraulic, passenger elevator. It is equipped with hands-free calling capability and is in good condition. This elevator should remain serviceable beyond the ten-year scope of this report, with scheduled preventive maintenance.

#### WORK COMPLETED SINCE LAST INSPECTION

- A new roll asphalt roof and flashing were installed in 2010.
- Some carpet and vinyl tile floor upgrades have been installed in approximately one-third of the building.
- Ceiling tile upgrades have been made throughout selected areas within the building.
- A new air handler on the second floor was replaced.

Note: The deficiencies outlined in this report were noted from a visual inspection. ISES engineers and architects developed projects with related costs that are needed over the next ten-year period to bring the facility to “like-new” condition. The costs developed do not represent the cost of a complete facility renovation. Soft costs not represented in this report include telecommunications, furniture, window treatment, space change, program issues, relocation, swing space, contingency, or costs that could not be identified or determined from the visual inspection and available building information. However, existing fixed building components and systems were thoroughly inspected. The developed costs represent correcting existing deficiencies and anticipated life cycle failures (within a ten-year period) to bring the facility to modern standards without any anticipation of change to facility space layout or function. Please refer to Section Three of this report for recommended Specific Project Details.

**Backlog Retirement Summary**  
**Completed and Partially Completed Projects**  
0035 : HOFFMAN (KATHERINE B) TEACH LAB

Project Number	Project Title	Pri Cls	Date	Project Notes	Total Cost	Actual Cost To Date	Remaining Cost	Percent Complete
0035HV01	HVAC UPGRADES	3	2/28/2011	HOFFMAN TEACHING LAB BLDG 35 - 2ND FLOOR HVAC UNIT REPLACEMENT - FUNDING FS 285	\$615,367	\$36,969	\$578,398	6%
0035IS01	NEW FLOOR FINISHES	3	5/8/2009	Carpet and vinyl tile upgrades		\$110,000	\$0	33%
			5/25/2010	ASBESTOS TILES HAVE COME LOOSE FROM FLOOR		\$1,368	\$0	0%
			8/19/2010	REMOVE AND REPLACE, DAMAGE AND MISSING FLOOR TILES, 5TH FLOOR, LAB 522	\$336,160	\$855	\$223,937	0%
<b>Subtotal for Priority Class 3</b>					<b>\$951,527</b>	<b>\$149,192</b>	<b>\$802,335</b>	
0035ES01	ROOF REPLACEMENT	4	11/18/2010	HOFFMAN TEACHING LAB BLDG 35 - REROOF - DESIGN FUNDED ON FS 275 \$52,860.42 & CONST FS 289 \$319,737.70	\$189,790	\$372,598	(\$182,809)	Complete
0035IS02	ACOUSTICAL CEILING REPLACEMENT	4	5/10/2011	Acoustical ceiling tile replacement	\$410,481	\$205,240	\$205,241	50%
<b>Subtotal for Priority Class 4</b>					<b>\$600,271</b>	<b>\$577,838</b>	<b>\$22,433</b>	
<b>Grand Totals</b>					<b>\$1,551,798</b>	<b>\$727,030</b>	<b>\$824,767</b>	

**Backlog Retirement Summary**  
**Completed Projects**  
0035 : HOFFMAN (KATHERINE B) TEACH LAB

<b>Project Number</b>	<b>Project Title</b>	<b>Pri Cls</b>	<b>Date</b>	<b>Project Notes</b>	<b>Total Cost</b>	<b>Actual Cost To Date</b>	<b>Variance</b>
0035ES01	ROOF REPLACEMENT	4	11/18/2010	HOFFMAN TEACHING LAB BLDG 35 - REROOF - DESIGN FUNDED ON FS 275 \$52,860.42 & CONST FS 289 \$319,737.70	\$189,790	\$372,598	\$-182,809
				<b>Subtotal for Priority Class 4</b>	<b>\$189,790</b>	<b>\$372,598</b>	<b>(\$182,809)</b>
				<b>Grand Totals</b>	<b>\$189,790</b>	<b>\$372,598</b>	<b>(\$182,809)</b>



## D. INSPECTION TEAM DATA

**DATE OF REINSPECTION:** May 10, 2012

### INSPECTION TEAM PERSONNEL:

<u>NAME</u>	<u>POSITION</u>	<u>SPECIALTY</u>
John Jones, PE	Project Architect	Interior Finishes / Exterior / ADA- Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
Imelda Jordan	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Norm Teahan, RA, AIA, NCARB	Project Architect	Interior Finishes / Exterior / ADA- Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
Jonathan Thomas, PE, CEM, LEED® AP	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health

### FACILITY CONTACTS:

<u>NAME</u>	<u>POSITION</u>
Thomas Shewan P. E.	Director of Maintenance

### REPORT DEVELOPMENT:

Report Development by: ISES CORPORATION  
2165 West Park Court  
Suite N  
Stone Mountain, GA 30087

Contact: Jonathan Thomas, Project Manager  
770-879-7376, ext. 152

## E. FACILITY CONDITION ANALYSIS - DEFINITIONS

The following information is a clarification of the Asset Report using example definitions.

### 1. MATERIAL AND LABOR COST FACTORS AND ADDITIONAL MARKUPS

The cost summaries and totals are illustrated by detailed projects sorted in multiple formats (shown in Sections 2 and 3). The project costs are adjusted from national averages to reflect conditions in Tallahassee, Florida using the R. S. Means City Cost Index for material / labor cost factors. Typical general contractor and professional fees are also included in the project costs.

<u>GLOBAL MARKUP PERCENTAGES</u>		<u>R.S. MEANS</u>
Local Labor Index:	100.0 %	of National Average
Local Materials Index:	97.5 %	of National Average
General Contractor Markup:	20.0 %	Contractor profit and overhead, bonds and insurance
Professional Fees:	16.0 %	Arch. / Eng. Firm design fees and in-house design cost

Note: For Sections 2 and 3, an *Inflation Adjustment Factor* will be designed and built into the program for the purpose of updating original costs to current dollars.

### 2. FACILITY CONDITION NEEDS INDEX (FCNI) (Shown in Sections 1 and 2)

FCNI = Facility Condition Needs Index, Total Cost vs. Replacement Cost. The FCNI provides a life cycle cost comparison. Facility replacement cost is based on replacement with current construction standards for the facility use type, and not original design parameters. This index gives the client a comparison within all buildings for identifying worst case / best case building conditions.

$$\text{FCNI} = \frac{\text{Deferred Maintenance} + \text{Capital Renewal} + \text{Plant Adaption}}{\text{Plant / Facility Replacement Cost}}$$

### 3. PROJECT NUMBER (Shown in Sections 2 and 3)

Example: Project Number = 0001-EL-04 (unique for each independent project)

- 0001 - Asset Identification Number
- EL - System Code, EL represents Electrical
- 04 - Sequential Assignment Project Number by Category / System

**4. PROJECT CLASSIFICATION** (Shown in Sections 2 and 3)

- A. Plant / Program Adaption: Expenditures required to adapt the physical plant to the evolving needs of the institution and to changing codes or standards. These are expenditures beyond normal maintenance. Examples include compliance with changing codes (e.g. accessibility), facility alterations required by changed teaching or research methods, and improvements occasioned by the adoption of modern technology (e.g., the use of personal computer networks).
- B. Deferred Maintenance: Refers to expenditures for repairs which were not accomplished as a part of normal maintenance or capital repair which have accumulated to the point that facility deterioration is evident and could impair the proper functioning of the facility. Costs estimated for deferred maintenance projects should include compliance with applicable codes, even if such compliance requires expenditures beyond those essential to affect the needed repairs. Deferred maintenance projects represent catch up expenses.
- C. Capital Renewal: A subset of regular or normal facility maintenance which refers to major repairs or the replacement / rebuilding of major facility components (e.g., roof replacement at the end of its normal useful life is capital repair; roof replacement several years after its normal useful life is deferred maintenance).

**5. PRIORITY CLASS** (Shown in Sections 2 and 3)

**PRIORITY 1 - Currently Critical (Immediate)**

Projects in this category require immediate action to:

- a. return a facility to normal operation
- b. stop accelerated deterioration
- c. correct a cited safety hazard

**PRIORITY 2 - Potentially Critical (Year One)**

Projects in this category, if not corrected expeditiously, will become critical within a year. Situations in this category include:

- a. intermittent interruptions
- b. rapid deterioration
- c. potential safety hazards

**PRIORITY 3 - Necessary - Not Yet Critical (Years Two to Five)**

Projects in this category include conditions requiring appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further.

**PRIORITY 4 - Recommended (Years Six to Ten)**

Projects in this category include items that represent a sensible improvement to existing conditions. These items are not required for the most basic function of a facility; however, Priority 4 projects will either improve overall usability and / or reduce long-term maintenance.



**9. DRAWINGS / PROJECT LOCATIONS** (Shown in Section 4)

The drawings for this facility are marked with icons (see legend) denoting the specific location(s) for each project. Within each icon is the last four characters of the respective project number (e.g., 0001IS01 is marked on plan by IS01). There is one set of drawings marked with icons representing all priority classes (1, 2, 3, 4, and 5). Icons for completed projects will not be shown on the drawings.

**10. LIFE CYCLE COST MODEL DESCRIPTION AND DEFINITIONS** (Shown in Section 5)

Included in this report is a Life Cycle Cost Model. This model consists of two elements, one is the component listing (starting on page 5.1.1) and the other is the Life Cycle Cost Projections Graph (page 5.2.1). The component list is a summary of all major systems and components within the facility. Each indicated component has the following associated information:

Unifomat Code	This is the standard Unifomat Code that applies to the component
Component Description	This line item describes the individual component
Qty	The quantity of the listed component
Units	The unit of measure associated with the quantity
Unit Cost	The cost to replace each individual component unit (this cost is in today's dollars)
Total Cost	Unit cost multiplied by quantity, also in today's dollars. Note that this is a one-time renewal / replacement cost
Install Date	Year that the component was installed. Where this data is not available, it defaults to the year the asset was constructed
Life Exp	Average life expectancy for each individual component

The component listing forms the basis for the Life Cycle Cost Projections Graph shown on page 5.2.1. This graph represents a projection over a fifty-year period (starting from the date the report is run) of expected component renewals based on each individual item's renewal cost and life span. Some components might require renewal several times within the fifty-year model, while others might not occur at all. Each individual component is assigned a renewal year based on life cycles, and the costs for each item are inflated forward to the appropriate year. The vertical bars shown on the graph represent the accumulated (and inflated) total costs for each individual year. At the bottom of the graph, the average annual cost per gross square foot (\$/GSF) is shown for the facility. In this calculation, all costs are not inflated. This figure can be utilized to assess the adequacy of existing capital renewal and repair budgets.

**11. PHOTO NUMBER** (Shown in Section 6)

A code shown on the Photo Log identifies the asset number, photo sequence, and a letter designation for architect, engineer, or vertical transportation.

Example: 0001006e

<u>Asset Number</u>	<u>Photo Sequence</u>	<u>Arch / Eng / VT</u>
0001	006	e

FLORIDA STATE UNIVERSITY  
 Facility Condition Analysis  
 Section One



CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
<b>SYSTEM DESCRIPTION: ACCESSIBILITY</b>			
AC1A	SITE	STAIR AND RAILINGS	Includes exterior stairs and railings which are not part of the building entrance points.
AC1B	SITE	RAMPS AND WALKS	Includes sidewalks, grade change ramps (except for a building entrance), curb ramps, etc.
AC1C	SITE	PARKING	Designated parking spaces, including striping, signage, access aisles and ramps, etc.
AC1D	SITE	TACTILE WARNINGS	Raised tactile warnings located at traffic crossing and elevation changes.
AC2A	BUILDING ENTRY	GENERAL	Covers all aspects of entry into the building itself, including ramps, lifts, doors and hardware, power operators, etc.
AC3A	INTERIOR PATH OF TRAVEL	LIFTS/RAMPS/ ELEVATORS	Interior lifts, ramps and elevators designed to accommodate level changes inside a building. Includes both installation and retrofitting.
AC3B	INTERIOR PATH OF TRAVEL	STAIRS AND RAILINGS	Upgrades to interior stairs and handrails for accessibility reasons.
AC3C	INTERIOR PATH OF TRAVEL	DOORS AND HARDWARE	Accessibility upgrades to the interior doors including widening, replacing hardware power, assisted operators, etc.
AC3D	INTERIOR PATH OF TRAVEL	SIGNAGE	Interior building signage upgrades for compliance with THE ADA.
AC3E	INTERIOR PATH OF TRAVEL	RESTROOMS/ BATHROOMS	Modifications to and installation of accessible public restrooms and bathrooms. Bathrooms that are an integral part of residential suites are catalogued under HC4A.
AC3F	INTERIOR PATH OF TRAVEL	DRINKING FOUNTAINS	Upgrading/replacing drinking fountains for reasons of accessibility.
AC3G	INTERIOR PATH OF TRAVEL	PHONES	Replacement/modification of public access telephones.
AC4A	GENERAL	FUNCTIONAL SPACE MODIFICATIONS	This category covers all necessary interior modifications necessary to make the services and functions of a building accessible. It includes installation of assistive listening systems, modification of living quarters, modifications to laboratory workstations, etc. Bathrooms that are integral to efficiency suites are catalogued here.
AC4B	GENERAL	OTHER	All accessibility issues not catalogued elsewhere.
<b>SYSTEM DESCRIPTION: ELECTRICAL</b>			
EL1A	INCOMING SERVICE	TRANSFORMER	Main building service transformer.
EL1B	INCOMING SERVICE	DISCONNECTS	Main building disconnect and switchgear.
EL1C	INCOMING SERVICE	FEEDERS	Incoming service feeders. Complete incoming service upgrades, including transformers, feeders, and main distribution panels are catalogued here.
EL1D	INCOMING SERVICE	METERING	Installation of meters to record consumption and/or demand.
EL2A	MAIN DISTRIBUTION PANELS	CONDITION UPGRADE	Main distribution upgrade due to deficiencies in condition.
EL2B	MAIN DISTRIBUTION PANELS	CAPACITY UPGRADE	Main distribution upgrades due to inadequate capacity.
EL3A	SECONDARY DISTRIBUTION	STEP-DOWN TRANSFORMERS	Secondary distribution step-down and isolation transformers.
EL3B	SECONDARY DISTRIBUTION	DISTRIBUTION NETWORK	Includes conduit, conductors, sub-distribution panels, switches, outlets, etc. Complete interior rewiring of a facility is catalogued here.
EL3C	SECONDARY DISTRIBUTION	MOTOR CONTROLLERS	Mechanical equipment motor starters and control centers.
EL4A	DEVICES AND FIXTURES	EXTERIOR LIGHTING	Exterior building lighting fixtures, including supply conductors and conduit.
EL4B	DEVICES AND FIXTURES	INTERIOR LIGHTING	Interior lighting fixtures (also system wide emergency lighting), including supply conductors and conduits.
EL4C	DEVICES AND FIXTURES	LIGHTING CONTROLLERS	Motion sensors, photocell controllers, lighting contactors, etc.
EL4D	DEVICES AND FIXTURES	GFCI PROTECTION	Ground fault protection, including GFCI receptacles and breakers.

CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
EL4E	DEVICES AND FIXTURES	LIGHTNING PROTECTION	Lightning arrestation systems including air terminals and grounding conductors.
EL5A	EMERGENCY POWER SYSTEM	GENERATION/ DISTRIBUTION	Includes generators, central battery banks, transfer switches, emergency power grid, etc.
EL6A	SYSTEMS	UPS/DC POWER SUPPLY	Uninterruptible power supply systems and DC motor-generator sets and distribution systems.
EL7A	INFRASTRUCTURE	ABOVE GROUND TRANSMISSION	Includes poles, towers, conductors, insulators, fuses, disconnects, etc.
EL7B	INFRASTRUCTURE	UNDERGROUND TRANSMISSION	Includes direct buried feeders, ductbanks, conduit, manholes, feeders, switches, disconnects, etc.
EL7C	INFRASTRUCTURE	SUBSTATIONS	Includes incoming feeders, breakers, buses, switchgear, meters, CTs, PTs, battery systems, capacitor banks, and all associated auxiliary equipment.
EL7D	INFRASTRUCTURE	DISTRIBUTION SWITCHGEAR	Stand-alone sectionalizing switches, distribution switchboards, etc.
EL7F	INFRASTRUCTURE	AREA AND STREET LIGHTING	Area and street lighting systems, including stanchions, fixtures, feeders, etc.
EL8A	GENERAL	OTHER	Electrical system components not catalogued elsewhere.
<b>SYSTEM DESCRIPTION: EXTERIOR</b>			
ES1A	FOUNDATION/FOOTING	STRUCTURE	Structural foundation improvements involving structural work on foundation wall/footing, piers, caissons, and piles, including crack repairs, shoring, and pointing
ES1B	FOUNDATION/FOOTING	DAMPPROOFING/ DEWATERING	Foundation/footing waterproofing work, including, damp-proofing, dewatering, insulation, etc.
ES2A	COLUMNS/BEAMS/ WALLS	STRUCTURE	Structural work to primary load-bearing structural components aside from floors, including columns, beams, bearing walls, lintels, arches, etc.
ES2B	COLUMNS/BEAMS/ WALLS	FINISH	Work involving restoration of the appearance and weatherproof integrity of exterior wall/structural envelope components, including masonry/pointing, expansion joints, efflorescence and stain removal, grouting, surfacing, chimney repairs, etc.
ES3A	FLOOR	STRUCTURE	Work concerning the structural integrity of the load supporting floors, both exposed and unexposed, including deformation, delamination, spalling, shoring, crack repair, etc.
ES4A	ROOF	REPAIR	Work on waterproof horizontal finish (roof) involving repair and/or limited replacement (<40% total), including membrane patching, flashing repair, coping caulk/resetting, PPT wall parging/coating, walkpad installation, skylight and roof hatch R&R, etc.
ES4B	ROOF	REPLACEMENT	Work involving total refurbishment of roofing system, including related component rehab.
ES5A	FENESTRATIONS	DOORS	Work on exterior exit/access door, including storefronts, airlocks, air curtains, vinyl slat doors, all power/manual operating hardware (except handicapped), etc.
ES5B	FENESTRATIONS	WINDOWS	Work on exterior fenestration closure and related components, including glass/metal/wood curtain walls, fixed or operable window sashes, glazing, frames, sills, casings, stools, seats, coatings, treatments, screens, storm windows, etc.
ES6A	GENERAL	ATTACHED STRUCTURE	Work on attached exterior structure components not normally considered in above categories, including porches, stoops, decks, monumental entrance stairs, cupolas, tower, etc.
ES6B	GENERAL	AREAWAYS	Work on attached grade level or below structural features, including subterranean lightwells, areaways, basement access stairs, etc.
ES6C	GENERAL	TRIM	Work on ornamental exterior (generally non-structural) elements, including beltlines, quoins, porticos, soffits, cornices, moldings, trim, etc.
ES6D	GENERAL	SUPERSTRUCTURE	Finish and structural work on non-standard structures with exposed load-bearing elements, such as stadiums, bag houses, bleachers, freestanding towers, etc.
ES6E	GENERAL	OTHER	Any exterior work not specifically categorized elsewhere, including finish and structural work on freestanding boiler stacks.

FLORIDA STATE UNIVERSITY  
 Facility Condition Analysis  
 Section One



CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
<b>SYSTEM DESCRIPTION: FIRE / LIFE SAFETY</b>			
FS1A	LIGHTING	EGRESS LIGHTING/EXIT SIGNAGE	R&R work on exit signage and packaged AC/DC emergency lighting.
FS2A	DETECTION/ALARM	GENERAL	Repair or replacement of fire alarm/detection system/components, including alarms, pull boxes, smoke/heat detectors, annunciator panels, central fire control stations, remote dialers, fire station communications, etc.
FS3A	SUPPRESSION	SPRINKLERS	Repair or installation of water sprinkler type automatic fire suppressions, including wet-pipe and dry-pipe systems, heads, piping, deflectors, valves, monitors, associated fire pump, etc.
FS3B	SUPPRESSION	STANDPIPE/HOSE	Repair or installation of standpipe system or components, including hardware, hoses, cabinets, nozzles, necessary fire pumping system, etc.
FS3C	SUPPRESSION	EXTINGUISHERS	Repairs or upgrades to F.E. cabinets/wall fastenings and handheld extinguisher testing/replacement.
FS3D	SUPPRESSION	OTHER	Other fire suppression items not specifically categorized elsewhere, including fire blankets, carbon dioxide automatic systems, Halon systems, dry chemical systems, etc.
FS4A	HAZARDOUS MATERIALS	STORAGE ENVIRONMENT	Installation or repair of special storage environment for the safe holding of flammable or otherwise dangerous materials/supplies, including vented flammables storage cabinets, holding pens/rooms, cages, fire safe chemical storage rooms, etc.
FS4B	HAZARDOUS MATERIALS	USER SAFETY	Improvements, repairs, installation, or testing of user safety equipment, including emergency eyewashes, safety showers, emergency panic/shut-down system, etc.
FS5A	EGRESS PATH	DESIGNATION	Installation, relocation or repair of posted diagrammatic emergency evacuation routes.
FS5B	EGRESS PATH	DISTANCE/GEOMETRY	Work involving remediation of egress routing problems, including elimination of dead end corridors, excessive egress distance modifications, and egress routing inadequacies.
FS5C	EGRESS PATH	SEPARATION RATING	Restoration of required fire protective barriers, including wall rating compromises, fire-rated construction, structural fire proofing, wind/safety glazing, transom retrofitting, etc.
FS5D	EGRESS PATH	OBSTRUCTION	Clearance of items restricting the required egress routes.
FS5E	EGRESS PATH	STAIRS RAILING	Retrofit of stair/landing configurations/structure, railing heights/geometries, etc.
FS5F	EGRESS PATH	FIRE DOORS/HARDWARE	Installation/replacement/repair of fire doors and hardware, including labeled fire doors, fire shutters, closers, magnetic holders, panic hardware, etc.
FS5G	EGRESS PATH	FINISH/FURNITURE RATINGS	Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.
FS6A	GENERAL	OTHER	Life/fire safety items not specifically categorized elsewhere.
<b>SYSTEM DESCRIPTION: HEALTH</b>			
HE1A	ENVIRONMENTAL CONTROL	EQUIPMENT AND ENCLOSURES	Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and all associated mechanical equipment.
HE1B	ENVIRONMENTAL CONTROL	OTHER	General environmental control problems not catalogued elsewhere.
HE2A	PEST CONTROL	GENERAL	Includes all measures necessary to control and destroy insects, rodents, and other pests.
HE3A	REFUSE	GENERAL	Issues related to the collection, handling, and disposal of refuse.
HE4A	SANITATION EQUIPMENT	LABORATORY AND PROCESS	Includes autoclaves, cage washers, steam cleaners, etc.
HE5A	FOOD SERVICE	KITCHEN EQUIPMENT	Includes ranges, grilles, cookers, sculleries, etc.
HE5B	FOOD SERVICE	COLD STORAGE	Includes the cold storage room and all associated refrigeration equipment.
HE6A	HAZARDOUS MATERIAL	STRUCTURAL ASBESTOS	Testing, abatement, and disposal of structural and building finish materials containing asbestos.
HE6B	HAZARDOUS MATERIAL	MECHANICAL ASBESTOS	Testing, abatement, and disposal of mechanical insulation materials containing asbestos.
HE6C	HAZARDOUS MATERIAL	PCBs	Includes testing, demolition, disposal, and cleanup of PCB contaminated substances.





CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
HE6D	HAZARDOUS MATERIAL	FUEL STORAGE	Includes monitoring, removal, and replacement of above and below ground fuel storage and distribution systems. Also includes testing and disposal of contaminated soils.
HE6E	HAZARDOUS MATERIAL	LEAD PAINT	Testing, removal, and disposal of lead-based paint systems.
HE6F	HAZARDOUS MATERIAL	OTHER	Handling, storage, and disposal of other hazardous materials.
HE7A	GENERAL	OTHER	Health related issues not catalogued elsewhere.
<b>SYSTEM DESCRIPTION: HVAC</b>			
HV1A	HEATING	BOILERS/STACKS/ CONTROLS	Boilers for heating purposes, including their related stacks, flues, and controls.
HV1B	HEATING	RADIATORS/ CONVECTORS	Including cast-iron radiators, fin tube radiators, baseboard radiators, etc.
HV1C	HEATING	FURNACE	Furnaces and their related controls, flues, etc.
HV1D	HEATING	FUEL SUPPLY/STORAGE	Storage and/or distribution of fuel for heating purposes, including tanks and piping networks and related leak detection/monitoring.
HV2A	COOLING	CHILLERS/ CONTROLS	Chiller units for production of chilled water for cooling purposes, related controls (not including mods for CFC compliance).
HV2B	COOLING	HEAT REJECTION	Repair/replacement of cooling towers, dry coolers, air-cooling, and heat rejection. Includes connection of once-through system to cooling tower.
HV3A	HEATING/COOLING	SYSTEM RETROFIT/ REPLACE	Replacement or major retrofit of HVAC systems.
HV3B	HEATING/COOLING	WATER TREATMENT	Treatment of hot water, chilled water, steam, condenser water, etc.
HV3C	HEATING/COOLING	PACKAGE/SELF-CONTAINED UNITS	Repair/replacement of self-contained/package type units, including stand-up units, rooftop units, window units, etc; both air conditioners and heat pumps.
HV3D	HEATING/COOLING	CONVENTIONAL SPLIT SYSTEMS	Repair, installation, or replacement of conventional split systems, both air conditioners and heat pumps, including independent component replacements of compressors and condensers.
HV4A	AIR MOVING/ VENTILATION	AIR HANDLERS/ FAN UNITS	Includes air handlers and coils, fan coil units, unit ventilators, filtration upgrades, etc., not including package/self-contained units, split systems, or other specifically categorized systems.
HV4B	AIR MOVING/ VENTILATION	EXHAUST FANS	Exhaust fan systems, including fans, range and fume hoods, controls, and related ductwork.
HV4C	AIR MOVING/ VENTILATION	OTHER FANS	Supply, return, or any other fans not incorporated into a component categorized elsewhere.
HV4D	AIR MOVING/ VENTILATION	AIR DISTRIBUTION NETWORK	Repair, replacement, or cleaning of air distribution network, including ductwork, terminal reheat/cool, VAV units, induction units, power induction units, insulation, dampers, linkages, etc.
HV5A	STEAM/HYDRONIC DISTRIBUTION	PIPING NETWORK	Repair/replacement of piping networks for heating and cooling systems, including pipe, fittings, insulation, related components, etc.
HV5B	STEAM/HYDRONIC DISTRIBUTION	PUMPS	Repair or replacement of pumps used in heating and cooling systems, related control components, etc.
HV5C	STEAM/HYDRONIC DISTRIBUTION	HEAT EXCHANGERS	Including shell-and-tube heat exchangers and plate heat exchangers for heating and cooling.
HV6A	CONTROLS	COMPLETE SYSTEM UPGRADE	Replacement of HVAC control systems.
HV6B	CONTROLS	MODIFICATIONS/ REPAIRS	Repair or modification of HVAC control system.
HV6C	CONTROLS	AIR COMPRESSORS/ DRYERS	Repair or modification of control air compressors and dryers.

CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
HV7A	INFRASTRUCTURE	STEAM/HOT WATER GENERATION	Generation of central steam and/or hot water, including boilers and related components.
HV7B	INFRASTRUCTURE	STEAM/HOT WATER DISTRIBUTION	Distribution system for central hot water and/or steam.
HV7C	INFRASTRUCTURE	CHILLED WATER GENERATION	Generation of central chilled water, including chillers and related components.
HV7D	INFRASTRUCTURE	CHILLED WATER DISTRIBUTION	Distribution system for central chilled water.
HV7E	INFRASTRUCTURE	TUNNELS/ MANHOLES/ TRENCHES	Repairs, installation, or replacement of utility system access chambers.
HV7F	INFRASTRUCTURE	OTHER	HVAC infrastructure issues not specifically categorized elsewhere.
HV8A	GENERAL	CFC COMPLIANCE	Chiller conversions/replacements for CFC regulatory compliance, monitoring, etc.
HV8B	GENERAL	OTHER	HVAC issues not catalogued elsewhere.
<b>SYSTEM DESCRIPTION: INTERIOR FINISHES / SYSTEMS</b>			
IS1A	FLOOR	FINISHES-DRY	R&R of carpet, hardwood strip flooring, concrete coating, vinyl linoleum and tile, marble, terrazzo, rubber flooring, and underlayment in predominantly dry areas ("dry" includes non-commercial kitchens)
IS1B	FLOOR	FINISHES-WET	Flooring finish/underlayment work in predominantly "wet" areas, including work with linoleum, rubber, terrazzo, concrete coating, quarry tile, ceramic tile, epoxy aggregate, etc.
IS2A	PARTITIONS	STRUCTURE	Structural work on full height permanent interior partitions, including wood/metal stud and drywall systems, CMU systems, structural brick, tile, glass block, etc.
IS2B	PARTITIONS	FINISHES	Work on full height permanent interior partitions, including R&R, to gypsum board, plaster, lath, wood paneling, acoustical panels, wall coverings, column coverings, tile, paint, etc.
IS3A	CEILINGS	REPAIR	Repair of interior ceilings (<40% of total), including tiles, gypsum board, plaster, paint, etc.
IS3B	CEILINGS	REPLACEMENT	Major refurbishments (>40% of total) to interior ceiling systems, including grid system replacements, structural framing, new suspended systems, paint, plastering, etc.
IS4A	DOORS	GENERAL	Any work on interior non-fire-rated doors, roll-up counter doors, mechanical/plumbing access doors, and all door hardware (except for reasons of access improvement).
IS5A	STAIRS	FINISH	Any finish restorative work to stair tower walking surfaces, including replacement of rubber treads, safety grips, nosings, etc. (except as required to accommodate disabled persons).
IS6A	GENERAL	MOLDING	R&R to interior trim/molding systems, including rubber/vinyl/wood base, crown/chair/ornamental moldings, cased openings, etc.
IS6B	GENERAL	CABINETS	R&R work to interior casework systems, including cabinets, countertops, wardrobes, lockers, mail boxes, built-in bookcases, lab/work benches, reagent shelving, etc. (except as required for access by the disabled).
IS6C	GENERAL	SCREENING	Work on temporary or partial height partitioning systems, including toilet partitions, urinal/vanity screens, etc.
IS6D	GENERAL	OTHER	Any work on interior elements not logically or specifically categorized elsewhere, including light covers, phone booths, interior lightwells, etc.
<b>SYSTEM DESCRIPTION: PLUMBING</b>			
PL1A	DOMESTIC WATER	PIPING NETWORK	Repair or replacement of domestic water supply piping network, insulation, hangers, etc.
PL1B	DOMESTIC WATER	PUMPS	Domestic water booster pumps, circulating pumps, related controls, etc.
PL1C	DOMESTIC WATER	STORAGE/ TREATMENT	Equipment or vessels for storage or treatment of domestic water.
PL1D	DOMESTIC WATER	METERING	Installation, repair, or replacement of water meters.



CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
PL1E	DOMESTIC WATER	HEATING	Domestic water heaters, including gas, oil, and electric water heaters, shell-and-tube heat exchangers, tank type, and instantaneous.
PL1F	DOMESTIC WATER	COOLING	Central systems for cooling and distributing drinking water.
PL1G	DOMESTIC WATER	FIXTURES	Plumbing fixtures, including sinks, drinking fountains, water closets, urinals, etc.
PL1H	DOMESTIC WATER	CONSERVATION	Alterations made to the water distribution system to conserve water.
PL1I	DOMESTIC WATER	BACKFLOW PROTECTION	Backflow protection devices, including backflow preventers, vacuum breakers, etc.
PL2A	WASTEWATER	PIPING NETWORK	Repair or replacement of building wastewater piping network.
PL2B	WASTEWATER	PUMPS	Pump systems used to lift wastewater, including sewage ejectors and other sump systems.
PL3A	SPECIAL SYSTEMS	PROCESS GAS/FLUIDS	Generation and/or distribution of process steam, compressed air, natural and LP gas, process water, vacuum, etc.
PL4A	INFRASTRUCTURE	POTABLE WATER STORAGE/ TREATMENT	Storage and treatment of potable water for distribution.
PL4B	INFRASTRUCTURE	INDUSTRIAL WATER DISTRIBUTION/ TREATMENT	Storage and treatment of industrial water for distribution.
PL4C	INFRASTRUCTURE	SANITARY WATER COLLECTION	Sanitary water collection systems and sanitary sewer systems, including combined systems.
PL4D	INFRASTRUCTURE	STORMWATER COLLECTION	Stormwater collection systems and storm sewer systems; storm water only.
PL4E	INFRASTRUCTURE	POTABLE WATER DISTRIBUTION	Potable water distribution network.
PL4F	INFRASTRUCTURE	WASTEWATER TREATMENT	Wastewater treatment plants, associated equipment, etc.
PL5A	GENERAL	OTHER	Plumbing issues not categorized elsewhere.
<b>SYSTEM DESCRIPTION: SITE</b>			
SI1A	ACCESS	PEDESTRIAN	Paved pedestrian surfaces, including walks, site stairs, step ramps, paths, pedestrian signage, sidewalk bridges/canopies, pedestrian plaza/mall areas, etc.
SI1B	ACCESS	VEHICULAR	Paved vehicular surfaces, including roads, paths, curbs, guards, bollards, bridges, skyways, joints, shoulder work, culverts, ditches, vehicular signage, etc.
SI2A	LANDSCAPE	GRADE/FLORA	Landscape related work, including new grass/turf refurbishment, grade improvements, catch basins, swales, berms, pruning, new ornamental flora, etc.
SI3A	HARDSCAPE	STRUCTURE	Permanent hard site features, predominantly ornamental, including terraces, fences, statues, freestanding signage, fountains, benches, etc.
SI4A	GENERAL	OTHER	Other site work not specifically categorized elsewhere.
<b>SYSTEM DESCRIPTION: SECURITY SYSTEMS</b>			
SS1A	LIGHTING	EXTERIOR	Fixtures, stanchions, foliage interference, cleanliness, locations, etc.
SS2A	SITE	FENCING	Perimeter campus fencing, individual building fencing, includes both pedestrian and vehicular control fences.
SS2B	SITE	GENERAL	Hidden areas due to foliage, fencing, parking, walls, etc.
SS3A	COMMUNICATIONS	EMERGENCY PHONES	Access, locations, visibility, function, reliability, etc.
SS4A	ACCESS CONTROL	DOORS	Access, locks, keys, two-way speakers, reliability, redundancy, etc.
SS4B	ACCESS CONTROL	WINDOWS	Locks, screens, access, reliability, etc.



CATEGORY CODE REPORT			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
SS4C	ACCESS CONTROL	SYSTEMS	Card key, proximity devices, data control, data use, reliability, system design, etc.
SS5A	MONITORING	SYSTEMS	Cameras, audio communication, monitoring stations, locations, system design, etc.
SS6A	CIRCULATION	PEDESTRIAN	On campus as well as to and from off-campus housing and class locations, etc.
SS6B	CIRCULATION	VEHICULAR	Guard gates, access, systems, data control and use, identification, etc.
SS7A	GENERAL	OTHER	General information/projects pertaining to security issues.
<b>SYSTEM DESCRIPTION: VERTICAL TRANSPORTATION</b>			
VT1A	MACHINE ROOM	GENERAL	Machine, worm gear, thrust bearing, brake, motors, sheaves, generator, controller, selector, governor, pump(s), valves, oil, access, lighting, ventilation, and floor.
VT2A	CAR	GENERAL	Position indicator, lighting, floor, gate-doors, operation devices, safeties, safety shoe, light ray/detection, emergency light, fire fighter service, car top, door operator, stop switch, car frame, car guides, sheaves, phone, and ventilation.
VT3A	HOISTWAY	GENERAL	Enclosure, fascia, interlock, doors, hangers, closers, sheaves, rails, hoistway switches, ropes, traveling cables, selector tape, weights, and compensation.
VT4A	HALL FIXTURES	GENERAL	Operating panel, position indicator, hall buttons, lobby panel, hall lanterns, fire fighter service, audible signals, and card/key access.
VT5A	PIT	GENERAL	Buffer(s), guards, sheaves, hydro packing, floor, lighting, and safety controls.
VT6A	OPERATING CONDITIONS	GENERAL	Door open time, door close time, door thrust, acceleration, deceleration, leveling, dwell time, speed, OFR time, and nudging.
VT7A	GENERAL	OTHER	General information/projects relating to vertical transportation system components.

FACILITY CONDITION ANALYSIS

**SECTION 2**

**DETAILED PROJECT SUMMARIES  
AND TOTALS**

**Detailed Project Totals**  
**Facility Condition Assessment**  
**System Code by Priority Class**  
**0035 : HOFFMAN (KATHERINE B) TEACH LAB**

System Code	System Description	Priority Classes				Subtotal
		1	2	3	4	
AC	ACCESSIBILITY	0	55,576	205,454	14,965	275,995
EL	ELECTRICAL	0	141,308	1,745,074	0	1,886,382
ES	EXTERIOR	0	0	0	108,276	108,276
FS	FIRE/LIFE SAFETY	0	587,602	0	0	587,602
HE	HEALTH	0	0	9,180	0	9,180
HV	HVAC	0	0	1,024,514	0	1,024,514
IS	INTERIOR FINISHES/SYS.	0	0	1,155,831	205,241	1,361,072
PL	PLUMBING	0	0	2,920,662	0	2,920,662
<b>TOTALS</b>		<b>\$0</b>	<b>\$784,486</b>	<b>\$7,060,714</b>	<b>\$328,482</b>	<b>\$8,173,682</b>

<b>Current Replacement Value</b>	<b>\$38,327,788</b>
<b>Facility Condition Needs Index</b>	<b>0.21</b>

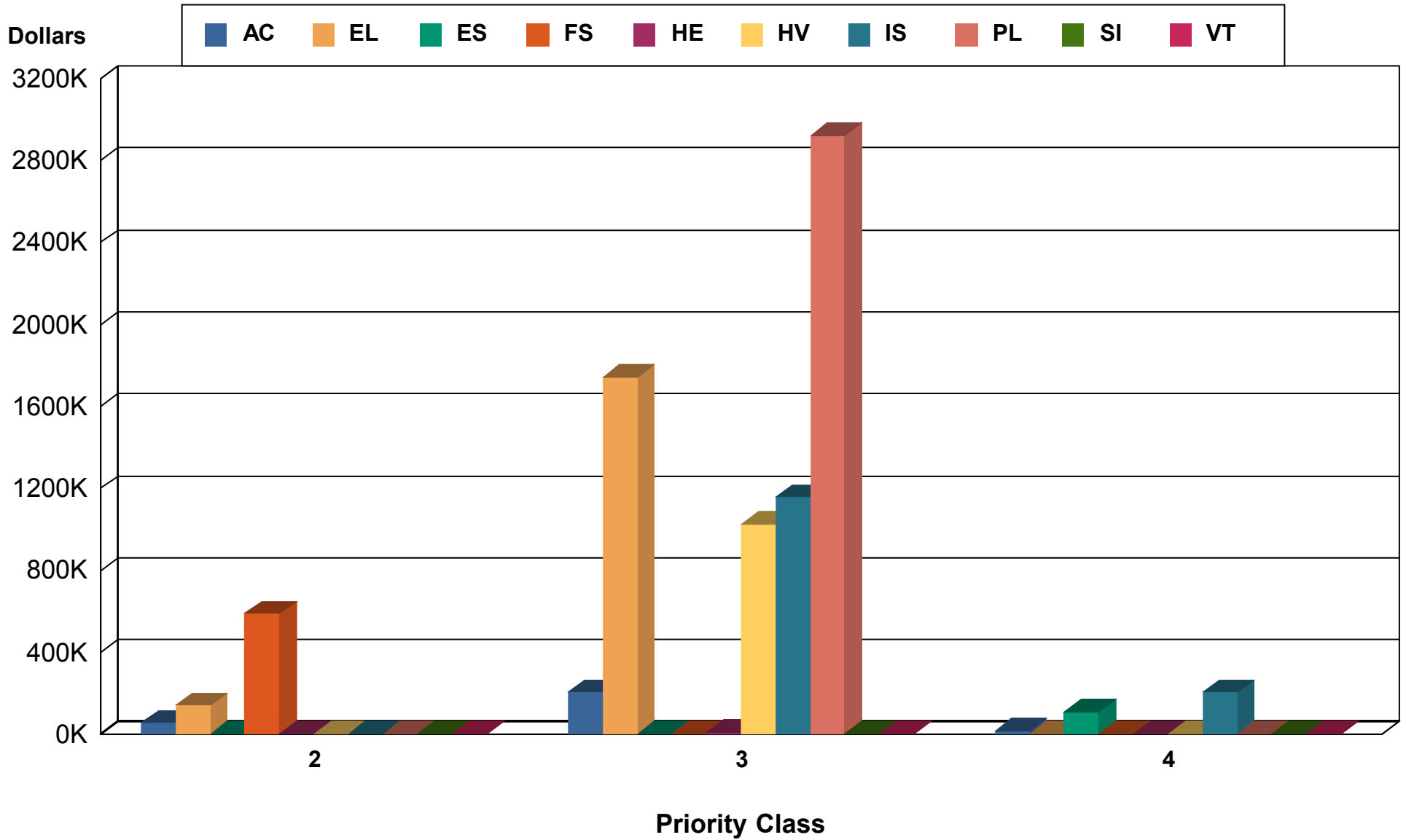
<b>Gross Square Feet</b>	<b>79,365</b>
--------------------------	---------------

<b>Total Cost Per Square Foot</b>	<b>\$102.99</b>
-----------------------------------	-----------------

# FACILITY CONDITION ASSESSMENT

## System Code by Priority Class

0035 : HOFFMAN (KATHERINE B) TEACH LAB



**Detailed Project Totals**  
**Facility Condition Assessment**  
**System Code by Project Class**  
**0035 : HOFFMAN (KATHERINE B) TEACH LAB**

System Code	System Description	Project Classes			Subtotal
		Capital Renewal	Deferred Maintenance	Plant Adaption	
AC	ACCESSIBILITY	0	0	275,995	275,995
EL	ELECTRICAL	1,728,915	16,159	141,308	1,886,382
ES	EXTERIOR	108,276	0	0	108,276
FS	FIRE/LIFE SAFETY	0	0	587,602	587,602
HE	HEALTH	0	9,180	0	9,180
HV	HVAC	0	1,024,514	0	1,024,514
IS	INTERIOR FINISHES/SYS.	1,361,072	0	0	1,361,072
PL	PLUMBING	29,360	2,891,302	0	2,920,662
<b>TOTALS</b>		<b>\$3,227,623</b>	<b>\$3,941,154</b>	<b>\$1,004,904</b>	<b>\$8,173,682</b>

<b>Current Replacement Value</b>	<b>\$38,327,788</b>
<b>Facility Condition Needs Index</b>	<b>0.21</b>

<b>Gross Square Feet</b>	<b>79,365</b>
--------------------------	---------------

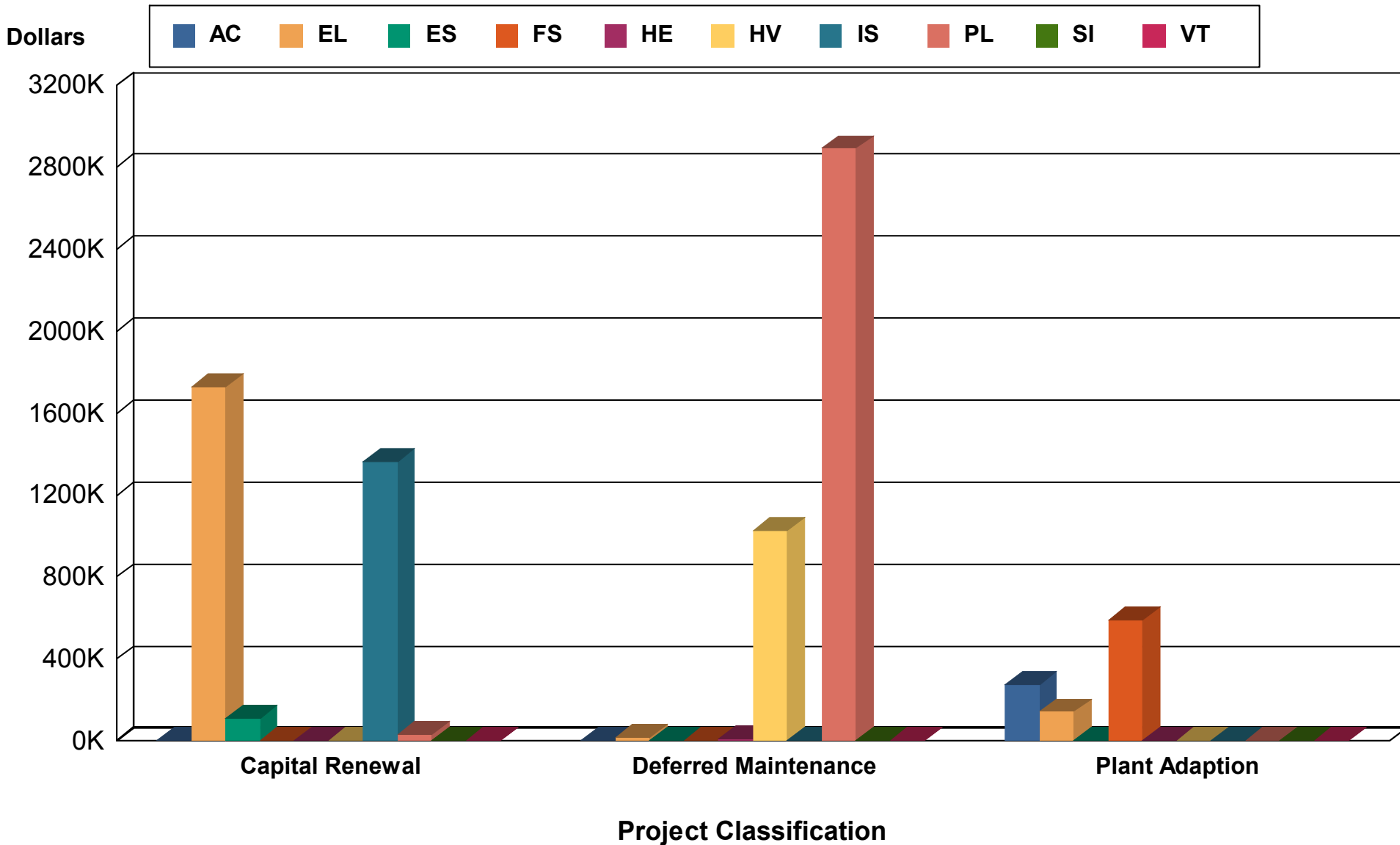
<b>Total Cost Per Square Foot</b>	<b>\$102.99</b>
-----------------------------------	-----------------



# FACILITY CONDITION ANALYSIS

## System Code by Project Class

0035 : HOFFMAN (KATHERINE B) TEACH LAB



**Detailed Project Summary**  
**Facility Condition Assessment**  
**Project Class by Priority Class**  
**0035 : HOFFMAN (KATHERINE B) TEACH LAB**

Project Class	Priority Classes				Subtotal
	1	2	3	4	
Capital Renewal	0	0	2,914,106	313,517	3,227,623
Deferred Maintenance	0	0	3,941,154	0	3,941,154
Plant Adaption	0	784,486	205,454	14,965	1,004,904
<b>TOTALS</b>	\$0	\$784,486	\$7,060,714	\$328,482	\$8,173,682

Current Replacement Value	\$38,327,788
Facility Condition Needs Index	0.21

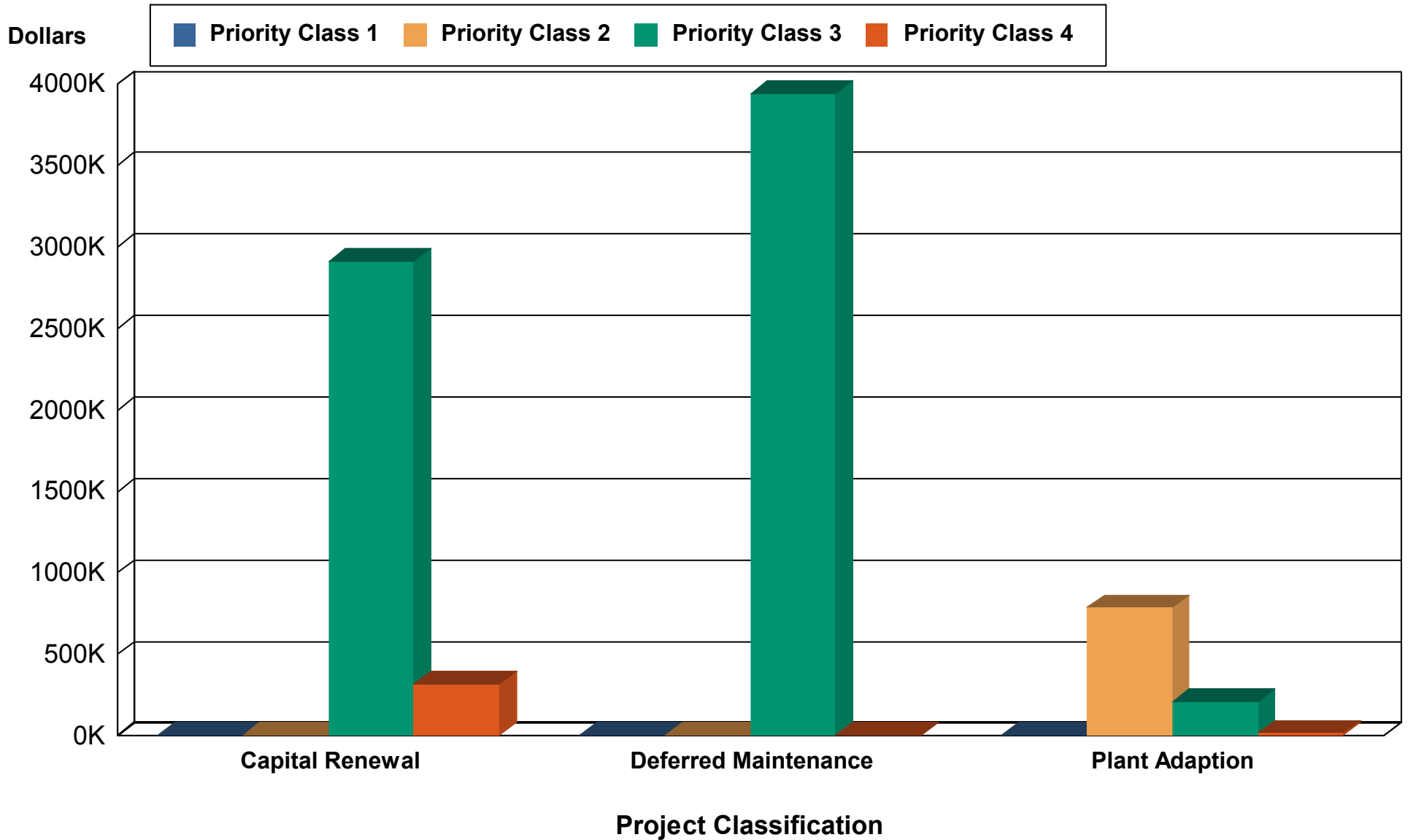
Gross Square Feet	79,365
-------------------	--------

Total Cost Per Square Foot	\$102.99
----------------------------	----------

# FACILITY CONDITION ASSESSMENT

## Project Class by Priority Class

0035 : HOFFMAN (KATHERINE B) TEACH LAB



Detailed Project Summary  
Facility Condition Assessment  
Priority Class - Priority Sequence  
0035 : HOFFMAN (KATHERINE B) TEACH LAB

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
FS3A	0035FS01	2	1	FIRE SPRINKLER SYSTEM INSTALLATION	506,553	81,049	0	587,602
AC3B	0035AC01	2	2	CODE COMPLIANT HANDRAIL / GUARDRAIL UPGRADES	47,910	7,666	0	55,576
EL5A	0035EL04	2	3	EMERGENCY POWER UPGRADE (REV 5/12)	121,817	19,491	0	141,308
<b>Totals for Priority Class 2</b>					<b>676,281</b>	<b>108,205</b>	<b>0</b>	<b>784,486</b>
HE1A	0035HE01	3	4	ENVIRONMENTAL BOX REFRIGERATION SYSTEM	7,914	1,266	0	9,180
AC3E	0035AC02	3	5	CREATE FULLY COMPLIANT RESTROOMS	138,870	22,219	0	161,090
AC3D	0035AC03	3	6	ROOM SIGNAGE UPGRADES	7,495	1,199	0	8,694
AC3C	0035AC05	3	7	UPGRADE DOOR HARDWARE (REV 5/12)	30,750	4,920	0	35,670
HV4B	0035HV02	3	8	REPLACE AGED FUME HOODS (REV 5/12)	384,583	61,533	0	446,116
HV3A	0035HV01	3	9	HVAC UPGRADES	530,489	84,878	36,969	578,398
EL4A	0035EL03	3	10	REPLACE TIMEWORN EXTERIOR LIGHT FIXTURES	13,930	2,229	0	16,159
EL3B	0035EL02	3	11	ELECTRICAL SYSTEM UPGRADE	1,106,798	177,088	0	1,283,885
EL1A	0035EL01	3	12	UPGRADE ELECTRIC SERVICE EQUIPMENT	383,646	61,383	0	445,030
IS1A	0035IS01	3	13	NEW FLOOR FINISHES	289,793	46,367	112,223	223,937
IS6B	0035IS03	3	14	LABORATORY CASEWORK AND CABINETRY REPLACEMENT	803,357	128,537	0	931,894
PL1A	0035PL04	3	15	WATER SUPPLY PIPING REPLACEMENT (5/12)	889,785	142,366	0	1,032,150
PL2A	0035PL05	3	16	DRAIN PIPING REPLACEMENT (5/12)	1,334,570	213,531	0	1,548,101
PL1E	0035PL03	3	17	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT (5/12)	60,236	9,638	0	69,874
PL3A	0035PL02	3	18	REPLACE HOUSE AIR COMPRESSOR	25,311	4,050	0	29,360
PL5A	0035PL01	3	19	PLUMBING FIXTURE UPGRADE (REV 5/12)	207,911	33,266	0	241,176
<b>Totals for Priority Class 3</b>					<b>6,215,437</b>	<b>994,470</b>	<b>149,192</b>	<b>7,060,714</b>
AC3F	0035AC04	4	20	INSTALL DUAL-LEVEL DRINKING FOUNTAIN (REV 5/12)	12,901	2,064	0	14,965

**Detailed Project Summary**  
**Facility Condition Assessment**  
**Priority Class - Priority Sequence**  
 0035 : HOFFMAN (KATHERINE B) TEACH LAB

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
ES2B	0035ES02	4	21	CLEAN, POINT, CAULK AND WEATHERPROOF EXTERIOR MASONRY	93,342	14,935	0	108,276
IS3B	0035IS02	4	22	ACOUSTICAL CEILING REPLACEMENT	353,863	56,618	205,240	205,241
<b>Totals for Priority Class 4</b>					<b>460,105</b>	<b>73,617</b>	<b>205,240</b>	<b>328,482</b>
<b>Grand Total:</b>					<b>7,351,822</b>	<b>1,176,292</b>	<b>354,432</b>	<b>8,173,682</b>

**Detailed Project Summary**  
**Facility Condition Assessment**  
**Project Classification**  
 0035 : HOFFMAN (KATHERINE B) TEACH LAB

Cat. Code	Project Number	Pri Seq	Project Classification	Pri Cls	Project Title	Construction Cost	Prof Fees	Actual Cost to Date	Remaining Cost
EL3B	0035EL02	11	Capital Renewal	3	ELECTRICAL SYSTEM UPGRADE	1,106,798	177,088	0	1,283,885
EL1A	0035EL01	12	Capital Renewal	3	UPGRADE ELECTRIC SERVICE EQUIPMENT	383,646	61,383	0	445,030
IS1A	0035IS01	13	Capital Renewal	3	NEW FLOOR FINISHES	289,793	46,367	112,223	223,937
IS6B	0035IS03	14	Capital Renewal	3	LABORATORY CASEWORK AND CABINETRY REPLACEMENT	803,357	128,537	0	931,894
PL3A	0035PL02	18	Capital Renewal	3	REPLACE HOUSE AIR COMPRESSOR	25,311	4,050	0	29,360
ES2B	0035ES02	21	Capital Renewal	4	CLEAN, POINT, CAULK AND WEATHERPROOF EXTERIOR MASONRY	93,342	14,935	0	108,276
IS3B	0035IS02	22	Capital Renewal	4	ACOUSTICAL CEILING REPLACEMENT	353,863	56,618	205,240	205,241
<b>Totals for Capital Renewal</b>						<b>3,056,109</b>	<b>488,977</b>	<b>317,463</b>	<b>3,227,623</b>
HE1A	0035HE01	4	Deferred Maintenance	3	ENVIRONMENTAL BOX REFRIGERATION SYSTEM	7,914	1,266	0	9,180
HV4B	0035HV02	8	Deferred Maintenance	3	REPLACE AGED FUME HOODS (REV 5/12)	384,583	61,533	0	446,116
HV3A	0035HV01	9	Deferred Maintenance	3	HVAC UPGRADES	530,489	84,878	36,969	578,398
EL4A	0035EL03	10	Deferred Maintenance	3	REPLACE TIMEWORN EXTERIOR LIGHT FIXTURES	13,930	2,229	0	16,159
PL1A	0035PL04	15	Deferred Maintenance	3	WATER SUPPLY PIPING REPLACEMENT (5/12)	889,785	142,366	0	1,032,150
PL2A	0035PL05	16	Deferred Maintenance	3	DRAIN PIPING REPLACEMENT (5/12)	1,334,570	213,531	0	1,548,101
PL1E	0035PL03	17	Deferred Maintenance	3	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT (5/12)	60,236	9,638	0	69,874
PL5A	0035PL01	19	Deferred Maintenance	3	PLUMBING FIXTURE UPGRADE (REV 5/12)	207,911	33,266	0	241,176
<b>Totals for Deferred Maintenance</b>						<b>3,429,417</b>	<b>548,707</b>	<b>36,969</b>	<b>3,941,154</b>

**Detailed Project Summary**  
**Facility Condition Assessment**  
**Project Classification**  
 0035 : HOFFMAN (KATHERINE B) TEACH LAB

Cat. Code	Project Number	Pri Seq	Project Classification	Pri Cls	Project Title	Construction Cost	Prof Fees	Actual Cost to Date	Remaining Cost
FS3A	0035FS01	1	Plant Adaption	2	FIRE SPRINKLER SYSTEM INSTALLATION	506,553	81,049	0	587,602
AC3B	0035AC01	2	Plant Adaption	2	CODE COMPLIANT HANDRAIL / GUARDRAIL UPGRADES	47,910	7,666	0	55,576
EL5A	0035EL04	3	Plant Adaption	2	EMERGENCY POWER UPGRADE (REV 5/12)	121,817	19,491	0	141,308
AC3E	0035AC02	5	Plant Adaption	3	CREATE FULLY COMPLIANT RESTROOMS	138,870	22,219	0	161,090
AC3D	0035AC03	6	Plant Adaption	3	ROOM SIGNAGE UPGRADES	7,495	1,199	0	8,694
AC3C	0035AC05	7	Plant Adaption	3	UPGRADE DOOR HARDWARE (REV 5/12)	30,750	4,920	0	35,670
AC3F	0035AC04	20	Plant Adaption	4	INSTALL DUAL-LEVEL DRINKING FOUNTAIN (REV 5/12)	12,901	2,064	0	14,965
<b>Totals for Plant Adaption</b>						<b>866,297</b>	<b>138,607</b>	<b>0</b>	<b>1,004,904</b>
<b>Grand Total:</b>						<b>7,351,822</b>	<b>1,176,292</b>	<b>354,432</b>	<b>8,173,682</b>

**Detailed Project Summary**  
**Facility Condition Assessment**  
**Energy Conservation**  
 0035 : HOFFMAN (KATHERINE B) TEACH LAB

<b>Cat. Code</b>	<b>Project Number</b>	<b>Pri Cls</b>	<b>Pri Seq</b>	<b>Project Title</b>	<b>Total Cost</b>	<b>Annual Savings</b>	<b>Simple Payback</b>
HV3A	0035HV01	3	9	HVAC UPGRADES	578,398	2,856	202.52
EL4A	0035EL03	3	10	REPLACE TIMEWORN EXTERIOR LIGHT FIXTURES	16,159	925	17.47
PL5A	0035PL01	3	19	PLUMBING FIXTURE UPGRADE (REV 5/12)	241,176	4,880	49.42
<b>Totals for Priority Class 3</b>					<b>835,733</b>	<b>8,661</b>	96.49
<b>Grand Total:</b>					<b>835,733</b>	<b>8,661</b>	96.49



Detailed Project Summary  
Facility Condition Assessment  
Category/System Code Update Report  
0035 : HOFFMAN (KATHERINE B) TEACH LAB

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fees	Actual Cost to Date	Remaining Cost
AC3B	0035AC01	2	2	CODE COMPLIANT HANDRAIL / GUARDRAIL UPGRADES	47,910	7,666	0	55,576
AC3E	0035AC02	3	5	CREATE FULLY COMPLIANT RESTROOMS	138,870	22,219	0	161,090
AC3D	0035AC03	3	6	ROOM SIGNAGE UPGRADES	7,495	1,199	0	8,694
AC3C	0035AC05	3	7	UPGRADE DOOR HARDWARE (REV 5/12)	30,750	4,920	0	35,670
AC3F	0035AC04	4	20	INSTALL DUAL-LEVEL DRINKING FOUNTAIN (REV 5/12)	12,901	2,064	0	14,965
<b>Totals for System Code: ACCESSIBILITY</b>					<b>237,926</b>	<b>38,068</b>	<b>0</b>	<b>275,995</b>
EL5A	0035EL04	2	3	EMERGENCY POWER UPGRADE (REV 5/12)	121,817	19,491	0	141,308
EL4A	0035EL03	3	10	REPLACE TIMEWORN EXTERIOR LIGHT FIXTURES	13,930	2,229	0	16,159
EL3B	0035EL02	3	11	ELECTRICAL SYSTEM UPGRADE	1,106,798	177,088	0	1,283,885
EL1A	0035EL01	3	12	UPGRADE ELECTRIC SERVICE EQUIPMENT	383,646	61,383	0	445,030
<b>Totals for System Code: ELECTRICAL</b>					<b>1,626,191</b>	<b>260,191</b>	<b>0</b>	<b>1,886,382</b>
ES2B	0035ES02	4	21	CLEAN, POINT, CAULK AND WEATHERPROOF EXTERIOR MASONRY	93,342	14,935	0	108,276
<b>Totals for System Code: EXTERIOR</b>					<b>93,342</b>	<b>14,935</b>	<b>0</b>	<b>108,276</b>
FS3A	0035FS01	2	1	FIRE SPRINKLER SYSTEM INSTALLATION	506,553	81,049	0	587,602
<b>Totals for System Code: FIRE/LIFE SAFETY</b>					<b>506,553</b>	<b>81,049</b>	<b>0</b>	<b>587,602</b>
HE1A	0035HE01	3	4	ENVIRONMENTAL BOX REFRIGERATION SYSTEM	7,914	1,266	0	9,180
<b>Totals for System Code: HEALTH</b>					<b>7,914</b>	<b>1,266</b>	<b>0</b>	<b>9,180</b>
HV4B	0035HV02	3	8	REPLACE AGED FUME HOODS (REV 5/12)	384,583	61,533	0	446,116
HV3A	0035HV01	3	9	HVAC UPGRADES	530,489	84,878	36,969	578,398
<b>Totals for System Code: HVAC</b>					<b>915,072</b>	<b>146,411</b>	<b>36,969</b>	<b>1,024,514</b>
IS1A	0035IS01	3	13	NEW FLOOR FINISHES	289,793	46,367	112,223	223,937

Detailed Project Summary  
Facility Condition Assessment  
Category/System Code Update Report  
0035 : HOFFMAN (KATHERINE B) TEACH LAB

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fees	Actual Cost to Date	Remaining Cost
IS6B	0035IS03	3	14	LABORATORY CASEWORK AND CABINETRY REPLACEMENT	803,357	128,537	0	931,894
IS3B	0035IS02	4	22	ACOUSTICAL CEILING REPLACEMENT	353,863	56,618	205,240	205,241
<b>Totals for System Code: INTERIOR FINISHES/SYS.</b>					<b>1,447,013</b>	<b>231,522</b>	<b>317,463</b>	<b>1,361,072</b>
PL1A	0035PL04	3	15	WATER SUPPLY PIPING REPLACEMENT (5/12)	889,785	142,366	0	1,032,150
PL2A	0035PL05	3	16	DRAIN PIPING REPLACEMENT (5/12)	1,334,570	213,531	0	1,548,101
PL1E	0035PL03	3	17	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT (5/12)	60,236	9,638	0	69,874
PL3A	0035PL02	3	18	REPLACE HOUSE AIR COMPRESSOR	25,311	4,050	0	29,360
PL5A	0035PL01	3	19	PLUMBING FIXTURE UPGRADE (REV 5/12)	207,911	33,266	0	241,176
<b>Totals for System Code: PLUMBING</b>					<b>2,517,812</b>	<b>402,850</b>	<b>0</b>	<b>2,920,662</b>
<b>Grand Total:</b>					<b>7,351,822</b>	<b>1,176,292</b>	<b>354,432</b>	<b>8,173,682</b>

FACILITY CONDITION ANALYSIS

**SECTION 3**

SPECIFIC PROJECT DETAILS  
ILLUSTRATING DESCRIPTION / COST

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035FS01	<b>Title:</b>	FIRE SPRINKLER SYSTEM INSTALLATION
<b>Priority Sequence:</b>	1		
<b>Priority Class:</b>	2		
<b>Category Code:</b>	FS3A	<b>System:</b>	FIRE/LIFE SAFETY
		<b>Component:</b>	SUPPRESSION
		<b>Element:</b>	SPRINKLERS
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	NFPA	13	
<b>Project Class:</b>	Plant Adaption		
<b>Project Date:</b>	09/13/2007		
<b>Project Location:</b>	Floor-wide: Floor(s) 1, 2, 3, 4, 5		

**Project Description**

There is no automatic fire suppression system. A building of this size and use should be protected throughout. Install an automatic fire sprinkler system throughout the facility, to include piping, valves, sprinkler heads, and piping supports. Install flow switches and sensors that interface with the fire alarm system. This project will reduce overall liability and risk of loss.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035FS01

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Install a wet-pipe sprinkler system, including valves, piping, sprinkler heads, piping supports, etc.	SF	79,365	\$1.80	\$142,857	\$2.93	\$232,539	\$375,396
<b>Project Totals:</b>				<b>\$142,857</b>		<b>\$232,539</b>	<b>\$375,396</b>

<b>Material/Labor Cost</b>		<b>\$375,396</b>
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$371,825</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$74,365
<b>Inflation</b>	+	<u>\$60,363</u>
<b>Construction Cost</b>		<u>\$506,553</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$81,049</u>
<b>Total Project Cost</b>		<u><u><b>\$587,602</b></u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035AC01	<b>Title:</b>	CODE COMPLIANT HANDRAIL / GUARDRAIL UPGRADES
<b>Priority Sequence:</b>	2		
<b>Priority Class:</b>	2		
<b>Category Code:</b>	AC3B	<b>System:</b>	ACCESSIBILITY
		<b>Component:</b>	INTERIOR PATH OF TRAVEL
		<b>Element:</b>	STAIRS AND RAILINGS
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	ADAAG	403.6, 505	
<b>Project Class:</b>	Plant Adaption		
<b>Project Date:</b>	04/30/2007		
<b>Project Location:</b>	Item Only: Floor(s) 1,2,3,4,5		

**Project Description**

The current ADA legislation requires that stairs have handrails that are on both sides, are continuous through the stair landings, have a specific end geometry, and are graspable. With some exceptions, this building has not been fitted with accessible handrails, and existing guardrails are typically non-compliant. Local codes now require that guardrail systems prevent the passage of a 4 inch diameter sphere and be at least 42 inches high. Additional exterior and interior handrails and guardrails are needed to meet current ADA and fire / life safety standards. It is recommended that all handrails be upgraded and be continuous throughout the landings at both sides of the stairs. The guardrails throughout this facility should also be properly infilled to reduce the potential for injury.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035AC01

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Handrail / guardrail installation	LF	1,500	\$16.60	\$24,900	\$7.26	\$10,890	\$35,790
<b>Project Totals:</b>				<b>\$24,900</b>		<b>\$10,890</b>	<b>\$35,790</b>

<b>Material/Labor Cost</b>		\$35,790
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$35,168</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$7,034
<b>Inflation</b>	+	<u>\$5,709</u>
<b>Construction Cost</b>		<u>\$47,910</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$7,666</u>
<b>Total Project Cost</b>		<u><u>\$55,576</u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035EL04	<b>Title:</b>	EMERGENCY POWER UPGRADE (REV 5/12)
<b>Priority Sequence:</b>	3		
<b>Priority Class:</b>	2		
<b>Category Code:</b>	EL5A	<b>System:</b>	ELECTRICAL
		<b>Component:</b>	EMERGENCY POWER SYSTEM
		<b>Element:</b>	GENERATION/DISTRIBUTION
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	NEC	700, 701, 702	
<b>Project Class:</b>	Plant Adaption		
<b>Project Date:</b>	09/13/2007		
<b>Project Location:</b>	Floor-wide: Floor(s) 1,2,3,4,5		

**Project Description**

A 10 kW, Kohler generator provides backup power for the building emergency circuit. This is original, past its life cycle, and of inadequate capacity to meet the emergency power needs of a modern science teaching laboratory. Remove the existing equipment. Install an appropriately sized diesel generator, associated ATS, and an emergency distribution network to provide emergency power for the life safety and specific non-essential loads. Loads considered to be life safety include egress lighting, exit signs, elevators, and fire alarm systems. Non-essential loads include HVAC equipment, refrigeration equipment, computer equipment, lab equipment, and the like.



**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035EL04

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Diesel generator set, including fuel tank, battery, charger, exhaust, and automatic transfer switches	KW	100	\$435	\$43,500	\$101	\$10,100	\$53,600
Emergency power network, to include power panels, conductors, raceways, and all connections and terminations	SF	79,365	\$0.20	\$15,873	\$0.27	\$21,429	\$37,302
<b>Project Totals:</b>				<b>\$59,373</b>		<b>\$31,529</b>	<b>\$90,902</b>

<b>Material/Labor Cost</b>		<b>\$90,902</b>
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$89,417</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$17,883
<b>Inflation</b>	+	<u>\$14,516</u>
<b>Construction Cost</b>		<u>\$121,817</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$19,491</u>
<b>Total Project Cost</b>		<u><u><b>\$141,308</b></u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035HE01	<b>Title:</b>	ENVIRONMENTAL BOX REFRIGERATION SYSTEM
<b>Priority Sequence:</b>	4		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	HE1A	<b>System:</b>	HEALTH
		<b>Component:</b>	ENVIRONMENTAL CONTROL
		<b>Element:</b>	EQUIPMENT AND ENCLOSURES
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	ASHRAE	15-2004	

**Project Class:** Deferred Maintenance

**Project Date:** 09/13/2007

**Project Location:** Room Only: Floor(s) 4  
Room(s) 406

**Project Description**

Room 406 is an environmental box with a split DX refrigeration system. The refrigeration system is past its life cycle. Replace the refrigeration system, including compressor, evaporator unit, and controls, with a new system that utilizes the latest CFC and HCFC-free refrigerant.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035HE01

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Refrigeration system, including compressor, evaporator unit, controls, refrigerant, and demolition of existing equipment	SYS	1	\$3,250	\$3,250	\$2,640	\$2,640	\$5,890
<b>Project Totals:</b>				<b>\$3,250</b>		<b>\$2,640</b>	<b>\$5,890</b>

<b>Material/Labor Cost</b>		\$5,890
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$5,809</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$1,162
<b>Inflation</b>	+	<u>\$943</u>
<b>Construction Cost</b>		<u>\$7,914</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$1,266</u>
<b>Total Project Cost</b>		<u><u>\$9,180</u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035AC02	<b>Title:</b>	CREATE FULLY COMPLIANT RESTROOMS
<b>Priority Sequence:</b>	5		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	AC3E	<b>System:</b>	ACCESSIBILITY
		<b>Component:</b>	INTERIOR PATH OF TRAVEL
		<b>Element:</b>	RESTROOMS/BATHROOMS
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	ADAAG	309, 604, 605, 606	
<b>Project Class:</b>	Plant Adaption		
<b>Project Date:</b>	04/30/2007		
<b>Project Location:</b>	Item Only: Floor(s) 1,4,5		

**Project Description**

The first and fifth floors have handicapped-accessible restrooms. The second and third floors do not have restrooms, and the fourth floor restrooms are not ADA compliant for handicapped access. To comply with current ADA legislation, upgrades to the restrooms on the fourth floor are recommended. Modify these facilities to create handicapped-accessible restrooms for both men and women, provide adequate turning radii and compliant clearances, as well as code-compliant fixtures, hardware, and accessories. In addition, install power-assisted restroom door openers to facilitate handicapped access at all restrooms.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035AC02

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
ADA restroom retrofit	EA	2	\$7,548	\$15,096	\$30,192	\$60,384	\$75,480
Power-assisted door opener, including installation	EA	6	\$2,718	\$16,308	\$1,822	\$10,932	\$27,240
<b>Project Totals:</b>				<b>\$31,404</b>		<b>\$71,316</b>	<b>\$102,720</b>

<b>Material/Labor Cost</b>		<b>\$102,720</b>
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$101,935</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$20,387
<b>Inflation</b>	+	<u>\$16,548</u>
<b>Construction Cost</b>		<u>\$138,870</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$22,219</u>
<b>Total Project Cost</b>		<u><u>\$161,090</u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035AC03	<b>Title:</b>	ROOM SIGNAGE UPGRADES
<b>Priority Sequence:</b>	6		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	AC3D	<b>System:</b>	ACCESSIBILITY
		<b>Component:</b>	INTERIOR PATH OF TRAVEL
		<b>Element:</b>	SIGNAGE
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	ADAAG	703.1	
<b>Project Class:</b>	Plant Adaption		
<b>Project Date:</b>	04/30/2007		
<b>Project Location:</b>	Floor-wide: Floor(s) 1,2,3,4,5		

**Project Description**

Current ADA legislation has established signage requirements for all permanent spaces in a building. None of the signs in this building conform to these criteria. To comply with the intent of this legislation, it is recommended that all non-compliant signage be removed and replaced with signs conforming to ADA standards. The new signs should be mounted in the correct location and should contain such code-required elements as Braille, pictograms, and high-contrast, raised lettering.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035AC03

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
ADA signage, including installation	EA	85	\$51.00	\$4,335	\$15.00	\$1,275	\$5,610
<b>Project Totals:</b>				<b>\$4,335</b>		<b>\$1,275</b>	<b>\$5,610</b>

<b>Material/Labor Cost</b>		\$5,610
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$5,502</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$1,100
<b>Inflation</b>	+	<u>\$893</u>
<b>Construction Cost</b>		<u>\$7,495</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$1,199</u>
<b>Total Project Cost</b>		<u><u><b>\$8,694</b></u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035AC05	<b>Title:</b>	UPGRADE DOOR HARDWARE (REV 5/12)
<b>Priority Sequence:</b>	7		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	AC3C	<b>System:</b>	ACCESSIBILITY
		<b>Component:</b>	INTERIOR PATH OF TRAVEL
		<b>Element:</b>	DOORS AND HARDWARE
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	ADAAG	309.4	
<b>Project Class:</b>	Plant Adaption		
<b>Project Date:</b>	04/30/2007		
<b>Project Location:</b>	Floor-wide: Floor(s) 1,2,3,4,5		

**Project Description**

Except for the updated classrooms on the first and second floors, this building generally lacks code-compliant lever hardware. Current ADA legislation requires that doors be operable with one hand without the need for tight grasping, pinching, or twisting of the wrist. To meet these requirements, replace existing knob hardware with code-compliant levers.



**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035AC05

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
ADA compliant-lever hardware, including installation	EA	70	\$262	\$18,340	\$67.00	\$4,690	\$23,030
<b>Project Totals:</b>				<b>\$18,340</b>		<b>\$4,690</b>	<b>\$23,030</b>

<b>Material/Labor Cost</b>		<b>\$23,030</b>
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$22,572</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$4,514
<b>Inflation</b>	+	<u>\$3,664</u>
<b>Construction Cost</b>		<u>\$30,750</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$4,920</u>
<b>Total Project Cost</b>		<u><u><b>\$35,670</b></u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035HV02	<b>Title:</b>	REPLACE AGED FUME HOODS (REV 5/12)
<b>Priority Sequence:</b>	8		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	HV4B	<b>System:</b>	HVAC
		<b>Component:</b>	AIR MOVING/VENTILATION
		<b>Element:</b>	EXHAUST FANS
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	ASHRAE 62-2004, 110-1995		
<b>Project Class:</b>	Deferred Maintenance		
<b>Project Date:</b>	09/13/2007		
<b>Project Location:</b>	Room Only: Floor(s) 4 Room(s) 405, 407, 411, 420		

**Project Description**

There are numerous fume hoods in this laboratory facility. Most are fairly new and in good condition. Some original fume hoods were noted on the fourth floor. These are in a deteriorated state and past due for replacement. Demolish the existing hoods and their related mechanical systems. Install modern fume hood systems, including fume hoods, fans, ductwork, controls, and all connections. Coordinate with proposed HVAC upgrades.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035HV02

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Fume hood replacement, including mechanical systems, controls, demolition, and disposal fees	SYS	13	\$17,400	\$226,200	\$4,750	\$61,750	\$287,950
<b>Project Totals:</b>				<b>\$226,200</b>		<b>\$61,750</b>	<b>\$287,950</b>

<b>Material/Labor Cost</b>		\$287,950
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$282,295</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$56,459
<b>Inflation</b>	+	<u>\$45,829</u>
<b>Construction Cost</b>		<u>\$384,583</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$61,533</u>
<b>Total Project Cost</b>		<u><u>\$446,116</u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035HV01	<b>Title:</b>	HVAC UPGRADES
<b>Priority Sequence:</b>	9		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	HV3A	<b>System:</b>	HVAC
		<b>Component:</b>	HEATING/COOLING
		<b>Element:</b>	SYSTEM RETROFIT/REPLACE
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Energy Conservation	\$2,856.00	
<b>Code Application:</b>	ASHRAE	62-2004	
<b>Project Class:</b>	Deferred Maintenance		
<b>Project Date:</b>	09/13/2007		
<b>Project Location:</b>	Floor-wide: Floor(s) 2,4,R		

**Project Description**

Most of the HVAC equipment in this building is in good condition, but two original air handlers were noted, one on the fourth floor and the other on the second floor. There are timeworn centrifugal exhausters on the roof. The old air handling systems and exhaust systems are recommended for replacement based on life cycle depletion. Remove aged equipment. Install new air handlers, exhaust fans, ductwork, terminal units, piping, controls, and electrical connections. Specify DDC for the new equipment. Incorporate variable frequency drives and heat recovery into the HVAC design as applicable.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035HV01

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Air handlers, exhaust fans, ductwork, VAVs, VFDs, DDCs, piping, electrical connections, and demolition of existing equipment	SF	7,500	\$23.63	\$177,225	\$28.88	\$216,600	\$393,825
<b>Project Totals:</b>				<b>\$177,225</b>		<b>\$216,600</b>	<b>\$393,825</b>

<b>Material/Labor Cost</b>		<b>\$393,825</b>
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$389,394</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$77,879
<b>Inflation</b>	+	<u>\$63,216</u>
<b>Construction Cost</b>		<u>\$530,489</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$84,878</u>
<b>Total Project Cost</b>		<b>\$615,367</b>
<b>Less Backlog Reduction</b>	-	<u>\$36,969</u>
<b>Remaining Cost</b>		<u><u><b>\$578,398</b></u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035EL03	<b>Title:</b>	REPLACE TIMEWORN EXTERIOR LIGHT FIXTURES
<b>Priority Sequence:</b>	10		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	EL4A	<b>System:</b>	ELECTRICAL
		<b>Component:</b>	DEVICES AND FIXTURES
		<b>Element:</b>	EXTERIOR LIGHTING
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Energy Conservation	\$925.00	
<b>Code Application:</b>	NEC	410	
<b>Project Class:</b>	Deferred Maintenance		
<b>Project Date:</b>	09/13/2007		
<b>Project Location:</b>	Floor-wide: Floor(s) 1, 2		

**Project Description**

There are worn and damaged incandescent and HID exterior lights around the building perimeter. Replace the incandescent fixtures with more efficient, compact fluorescent types. Replace the HID fixtures with new efficient units. Specify photocell control for the exterior lights.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035EL03

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Installation of HID wall-mount fixture and demolition of existing fixture	EA	9	\$240	\$2,160	\$122	\$1,098	\$3,258
Installation of compact fluorescent, wall-mount exterior light and demolition of existing light	EA	5	\$118	\$590	\$124	\$620	\$1,210
Installation of compact fluorescent, recessed exterior light and demolition of existing light	EA	27	\$129	\$3,483	\$90.00	\$2,430	\$5,913
<b>Project Totals:</b>				<b>\$6,233</b>		<b>\$4,148</b>	<b>\$10,381</b>

<b>Material/Labor Cost</b>		\$10,381
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$10,225</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$2,045
<b>Inflation</b>	+	<u>\$1,660</u>
<b>Construction Cost</b>		<u>\$13,930</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$2,229</u>
<b>Total Project Cost</b>		<u><u>\$16,159</u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035EL02	<b>Title:</b>	ELECTRICAL SYSTEM UPGRADE
<b>Priority Sequence:</b>	11		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	EL3B	<b>System:</b>	ELECTRICAL
		<b>Component:</b>	SECONDARY DISTRIBUTION
		<b>Element:</b>	DISTRIBUTION NETWORK
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	NEC	Chapters 1-4	
<b>Project Class:</b>	Capital Renewal		
<b>Project Date:</b>	09/13/2007		
<b>Project Location:</b>	Floor-wide: Floor(s) 1, 2, 3, 4, 5		

**Project Description**

Much of the electrical system is original, but some upgrades have occurred during past renovations. There are original GE power panels, and the original devices, including switches and receptacles, are uniformly timeworn. In addition, standard receptacles are present in wet areas where GFCI receptacles are needed to prevent shock hazards. An upgrade of the building electrical system is recommended. Remove aged electrical components and branch circuitry. Install new power panels, switches, raceways, conductors, and devices. Provide molded case thermal-magnetic circuit breakers and HACR circuit breakers for HVAC equipment. Redistribute the electrical loads to the appropriate areas to ensure safe and reliable power to building occupants. Provide GFCI protection where required, and clearly label all panels for circuit identification.



**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035EL02

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Power panels, conductors, raceways, devices, demolition, and cut and patching materials	SF	62,500	\$5.25	\$328,125	\$7.88	\$492,500	\$820,625
<b>Project Totals:</b>				<b>\$328,125</b>		<b>\$492,500</b>	<b>\$820,625</b>

<b>Material/Labor Cost</b>		\$820,625
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$812,422</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$162,484
<b>Inflation</b>	+	<u>\$131,891</u>
<b>Construction Cost</b>		<u>\$1,106,798</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$177,088</u>
<b>Total Project Cost</b>		<u><u>\$1,283,885</u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035EL01	<b>Title:</b>	UPGRADE ELECTRIC SERVICE EQUIPMENT
<b>Priority Sequence:</b>	12		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	EL1A	<b>System:</b>	ELECTRICAL
		<b>Component:</b>	INCOMING SERVICE
		<b>Element:</b>	TRANSFORMER
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	NEC	230, 450	
<b>Project Class:</b>	Capital Renewal		
<b>Project Date:</b>	09/13/2007		
<b>Project Location:</b>	Room Only: Floor(s) 1		

**Project Description**

The main switchgear is rated at 277/480 volts and has a 2,500 amp breaker. There is a 500 kVA step-down transformer that provides 120/208 volts to 1,200 amp switchgear. This is original switchgear manufactured by General Electric. It has exceeded its life cycle and is due for replacement. Remove existing electric service equipment. Install new transformers, switchgear, conductors, connections, and terminations. Main switchgear components should include a ground fault main circuit breaker, draw-out distribution breakers for ease of maintenance, digital metering for remote control / monitoring, and transient surge protection.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035EL01

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
480 volt service transformer, switchgear, and all connections and terminations	AMP	2,500	\$37.00	\$92,500	\$20.00	\$50,000	\$142,500
120/208 volt step-down transformer, main distribution, and all connections and terminations	AMP	1,200	\$86.00	\$103,200	\$34.00	\$40,800	\$144,000
<b>Project Totals:</b>				<b>\$195,700</b>		<b>\$90,800</b>	<b>\$286,500</b>

<b>Material/Labor Cost</b>		\$286,500
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$281,608</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$56,322
<b>Inflation</b>	+	<u>\$45,717</u>
<b>Construction Cost</b>		<u>\$383,646</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$61,383</u>
<b>Total Project Cost</b>		<u><u>\$445,030</u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

**Project Number:** 0035IS01 **Title:** NEW FLOOR FINISHES

**Priority Sequence:** 13

**Priority Class:** 3

**Category Code:** IS1A **System:** INTERIOR FINISHES/SYS.  
**Component:** FLOOR  
**Element:** FINISHES-DRY

**Building Code:** 0035  
**Building Name:** HOFFMAN (KATHERINE B) TEACH LAB

**Subclass/Savings:** Not Applicable

**Code Application:** EPA 40 CFR 61.M, 763  
OSHA 29 CFR 1910.1001, 1926.1101

**Project Class:** Capital Renewal

**Project Date:** 04/30/2007

**Project Location:** Floor-wide: Floor(s) 1,2,3,4,5

**Project Description**

Interior floor finishes vary in application and condition from area to area and floor to floor with some upgrades made three years ago. The enclosed perimeter walkways are unfinished concrete, while the interior laboratory is predominantly vinyl tile, and the offices are carpeted. Carpet installations in facilities with similar traffic patterns tend to reach the end of their useful service life in seven to ten years, and should then be replaced. Typically, the carpet in this facility is in good overall condition, and universal carpet replacement is warranted within the next ten years. The aged vinyl floor tile, as well as the 9 x 9 inch tile suspected of containing asbestos, should be replaced. Much of the tile has a dated appearance. As interior enhancement upgrades are being recommended, room renovations should include a universal tile replacement with a modern design vinyl tile. The concrete floors have undergone little maintenance since original construction. Clean the concrete floor areas, and reseal the surface to eliminate spill penetration and dusting. Maintenance areas with painted safety designations on the floor should have safety painting reapplied after cleaning and resealing.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035IS01

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Carpet installation	SY	1,763	\$21.00	\$37,023	\$15.00	\$26,445	\$63,468
Vinyl tile replacement	SF	47,619	\$2.25	\$107,143	\$0.60	\$28,571	\$135,714
Estimated allowance for asbestos sampling and abatement	LOT	1	\$2,995	\$2,995	\$4,475	\$4,475	\$7,470
Clean and reseal concrete floors	SF	15,875	\$0.25	\$3,969	\$0.37	\$5,874	\$9,843
<b>Project Totals:</b>				<b>\$151,130</b>		<b>\$65,365</b>	<b>\$216,495</b>

<b>Material/Labor Cost</b>		\$216,495
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$212,716</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$42,543
<b>Inflation</b>	+	<u>\$34,533</u>
<b>Construction Cost</b>		<u>\$289,793</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$46,367</u>
<b>Total Project Cost</b>		<b>\$336,160</b>
<b>Less Backlog Reduction</b>	-	<u>\$112,223</u>
<b>Remaining Cost</b>		<b><u><u>\$223,937</u></u></b>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035IS03	<b>Title:</b>	LABORATORY CASEWORK AND CABINETS REPLACEMENT
<b>Priority Sequence:</b>	14		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	IS6B	<b>System:</b>	INTERIOR FINISHES/SYS.
		<b>Component:</b>	GENERAL
		<b>Element:</b>	CABINETS
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	ADAAG	804	
<b>Project Class:</b>	Capital Renewal		
<b>Project Date:</b>	04/30/2007		
<b>Project Location:</b>	Floor-wide: Floor(s) 2,3,4,5		

**Project Description**

Laboratory casework and countertops vary in design, age, and degree of deterioration within floors and suites. Continuous contact with corrosive chemicals, reagents, and abrasives accelerate the wear of this furniture. Selective replacement of both base cabinets and countertops should be anticipated within ten years. Approximately 60 percent of the lab cabinetry and countertops are recommended for replacement. The new cabinetry is to be designed in accordance with current accessibility requirements, and should include utility upgrades.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035IS03

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Base cabinets and reagent shelving	LF	850	\$375	\$318,750	\$150	\$127,500	\$446,250
Epoxy resin benchtop	LF	850	\$75.00	\$63,750	\$105	\$89,250	\$153,000
<b>Project Totals:</b>				<b>\$382,500</b>		<b>\$216,750</b>	<b>\$599,250</b>

<b>Material/Labor Cost</b>		\$599,250
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$589,688</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$117,938
<b>Inflation</b>	+	<u>\$95,732</u>
<b>Construction Cost</b>		<u>\$803,357</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$128,537</u>
<b>Total Project Cost</b>		<u><u>\$931,894</u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035PL04	<b>Title:</b>	WATER SUPPLY PIPING REPLACEMENT (5/12)
<b>Priority Sequence:</b>	15		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	PL1A	<b>System:</b>	PLUMBING
		<b>Component:</b>	DOMESTIC WATER
		<b>Element:</b>	PIPING NETWORK
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	IPC	Chapter 6	
<b>Project Class:</b>	Deferred Maintenance		
<b>Project Date:</b>	05/10/2012		
<b>Project Location:</b>	Floor-wide: Floor(s) 1,2,3,4,5		

**Project Description**

Replace water supply and process piping as needed throughout the facility. Remove the aging water supply and process piping. Install new copper water supply piping with fiberglass insulation. Provide isolation valves, pressure regulators, shock absorbers, and backflow prevention devices in appropriate areas. Install new process piping as needed such as gas lines, vacuum lines, compressed air lines, purified water lines, process steam lines, etc., along with related isolation valves and gas cocks. Clearly label exposed piping for identification of the conveyed fluids and gases.



**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035PL04

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Water and specialty pipe and fittings, valves, backflow prevention devices, insulation, hangers, labels, demolition, and cut and patching materials	SF	79,365	\$2.69	\$213,492	\$6.72	\$533,333	\$746,825
<b>Project Totals:</b>				<b>\$213,492</b>		<b>\$533,333</b>	<b>\$746,825</b>

<b>Material/Labor Cost</b>		\$746,825
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$741,487</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$148,297
<b>Inflation</b>	+	<u>\$0</u>
<b>Construction Cost</b>		<u>\$889,785</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$142,366</u>
<b>Total Project Cost</b>		<u><u>\$1,032,150</u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035PL05	<b>Title:</b>	DRAIN PIPING REPLACEMENT (5/12)
<b>Priority Sequence:</b>	16		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	PL2A	<b>System:</b>	PLUMBING
		<b>Component:</b>	WASTEWATER
		<b>Element:</b>	PIPING NETWORK
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	IPC	Chapters 7-12	
<b>Project Class:</b>	Deferred Maintenance		
<b>Project Date:</b>	05/10/2012		
<b>Project Location:</b>	Floor-wide: Floor(s) 1,2,3,4,5		

**Project Description**

Replacement of the aging drain piping is recommended throughout the facility. Failure to replace the old drain piping systems will result in frequent leaks and escalating maintenance costs. Remove sanitary and storm drain piping as needed. Install new cast-iron drain piping networks with copper run-outs to the fixtures to convey normal wastes. Install corrosion resistant pipe and fittings for acid wastes. Install new floor drains, roof drains, and traps.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035PL05

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Cast-iron, copper, and corrosion resistant pipe and fittings, hangers, floor / roof drains, traps, demolition, and cut and patching materials	SF	79,365	\$4.28	\$339,682	\$9.84	\$780,952	\$1,120,634
<b>Project Totals:</b>				<b>\$339,682</b>		<b>\$780,952</b>	<b>\$1,120,634</b>

<b>Material/Labor Cost</b>		\$1,120,634
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$1,112,142</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$222,428
<b>Inflation</b>	+	<u>\$0</u>
<b>Construction Cost</b>		<u>\$1,334,570</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$213,531</u>
<b>Total Project Cost</b>		<u><u>\$1,548,101</u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035PL03	<b>Title:</b>	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT (5/12)
<b>Priority Sequence:</b>	17		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	PL1E	<b>System:</b>	PLUMBING
		<b>Component:</b>	DOMESTIC WATER
		<b>Element:</b>	HEATING
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	Not Applicable		
<b>Project Class:</b>	Deferred Maintenance		
<b>Project Date:</b>	05/10/2012		
<b>Project Location:</b>	Item Only: Floor(s) 1		

**Project Description**

Replacement of the domestic hot water converter is recommended. With age, heat exchanger efficiency is reduced by internal tube scaling. Internal wear will eventually lead to failure, allowing contaminants to enter the water system. Remove the existing system. Install a new heat exchanger, pumps, piping, and controls as needed.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035PL03

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Heat exchanger, pumps, piping, valves, controls, insulation, and demolition	GPM	140	\$200	\$28,017	\$163	\$22,880	\$50,897
<b>Project Totals:</b>				<b>\$28,017</b>		<b>\$22,880</b>	<b>\$50,897</b>

<b>Material/Labor Cost</b>		\$50,897
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$50,197</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$10,039
<b>Inflation</b>	+	<u>\$0</u>
<b>Construction Cost</b>		<u>\$60,236</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$9,638</u>
<b>Total Project Cost</b>		<u><u>\$69,874</u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035PL02	<b>Title:</b>	REPLACE HOUSE AIR COMPRESSOR
<b>Priority Sequence:</b>	18		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	PL3A	<b>System:</b>	PLUMBING
		<b>Component:</b>	SPECIAL SYSTEMS
		<b>Element:</b>	PROCESS GAS/FLUIDS
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	Not Applicable		
<b>Project Class:</b>	Capital Renewal		
<b>Project Date:</b>	09/13/2007		
<b>Project Location:</b>	Room Only: Floor(s) 1		

**Project Description**

There are two air compressors in the first floor mechanical room. The smaller air compressor is abandoned. The larger one is in operating condition, but is at life cycle depletion. Remove the two air compressors. Install a new laboratory-grade air compressor package, including dryer, all connections, and controls.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035PL02

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Medical- / laboratory-grade air compressor system with air dryer, all connections, and demolition fees	HP	5	\$2,890	\$14,450	\$898	\$4,490	\$18,940
<b>Project Totals:</b>				<b>\$14,450</b>		<b>\$4,490</b>	<b>\$18,940</b>

<b>Material/Labor Cost</b>		<b>\$18,940</b>
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$18,579</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$3,716
<b>Inflation</b>	+	<u>\$3,016</u>
<b>Construction Cost</b>		<u>\$25,311</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$4,050</u>
<b>Total Project Cost</b>		<u><u><b>\$29,360</b></u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035PL01	<b>Title:</b>	PLUMBING FIXTURE UPGRADE (REV 5/12)
<b>Priority Sequence:</b>	19		
<b>Priority Class:</b>	3		
<b>Category Code:</b>	PL5A	<b>System:</b>	PLUMBING
		<b>Component:</b>	GENERAL
		<b>Element:</b>	OTHER
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Energy Conservation	\$4,880.00	
<b>Code Application:</b>	IPC	All Chapters	
	OSHA	29 CFR 1910.1001, 1926.1101	
	EPA	40 CFR 61.M, 763	
<b>Project Class:</b>	Deferred Maintenance		
<b>Project Date:</b>	05/10/2012		
<b>Project Location:</b>	Floor-wide: Floor(s) 1,2,3,4,5		

**Project Description**

Plumbing fixture upgrades are recommended. Remove the existing plumbing fixtures, and install new water-conserving fixtures, including rough-ins. Specify automatic, hands-free faucets and flush valves for the restroom fixtures. These should be hard-wired, not battery-type. Automatic flush valves help maintain clean and sanitary facilities. Automatic faucets conserve water.



**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035PL01

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Lab sink, acid resistant, trim fittings, rough-in, and demolition	EA	92	\$563	\$51,796	\$837	\$77,004	\$128,800
Lavatory, automatic faucets, trap, rough-in, and demolition	EA	12	\$794	\$9,528	\$909	\$10,908	\$20,436
Water closet, automatic flush valve, rough-in, and demolition	EA	10	\$1,163	\$11,630	\$813	\$8,130	\$19,760
Urinal, automatic flush valve, rough-in, and demolition	EA	4	\$654	\$2,616	\$884	\$3,536	\$6,152
<b>Project Totals:</b>				<b>\$75,570</b>		<b>\$99,578</b>	<b>\$175,148</b>

<b>Material/Labor Cost</b>		\$175,148
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$173,259</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$34,652
<b>Inflation</b>	+	<u>\$0</u>
<b>Construction Cost</b>		<u>\$207,911</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$33,266</u>
<b>Total Project Cost</b>		<u><u>\$241,176</u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035AC04	<b>Title:</b>	INSTALL DUAL-LEVEL DRINKING FOUNTAIN (REV 5/12)
<b>Priority Sequence:</b>	20		
<b>Priority Class:</b>	4		
<b>Category Code:</b>	AC3F	<b>System:</b>	ACCESSIBILITY
		<b>Component:</b>	INTERIOR PATH OF TRAVEL
		<b>Element:</b>	DRINKING FOUNTAINS
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	ADAAG	211, 602	
<b>Project Class:</b>	Plant Adaption		
<b>Project Date:</b>	04/30/2007		
<b>Project Location:</b>	Item Only: Floor(s) 1,2,4,5		

**Project Description**

Present legislation requires that, if drinking fountains are provided, half of all fountains, or at least one per floor, be designed for use by people in wheelchairs and those who have trouble stooping. None of the single-level drinking fountains in this facility are ADA-compliant. It is recommended that the single-level fountains on floors one, two, four, and five be replaced with a compliant, dual-level, refrigerated unit.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035AC04

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Dual-level drinking fountain, including alcove, etc.	EA	4	\$1,426	\$5,704	\$977	\$3,908	\$9,612
<b>Project Totals:</b>				<b>\$5,704</b>		<b>\$3,908</b>	<b>\$9,612</b>

<b>Material/Labor Cost</b>		\$9,612
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$9,469</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$1,894
<b>Inflation</b>	+	<u>\$1,537</u>
<b>Construction Cost</b>		<u>\$12,901</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$2,064</u>
<b>Total Project Cost</b>		<u><u>\$14,965</u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035ES02	<b>Title:</b>	CLEAN, POINT, CAULK AND WEATHERPROOF EXTERIOR MASONRY
<b>Priority Sequence:</b>	21		
<b>Priority Class:</b>	4		
<b>Category Code:</b>	ES2B	<b>System:</b>	EXTERIOR
		<b>Component:</b>	COLUMNS/BEAMS/WALLS
		<b>Element:</b>	FINISH
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	Not Applicable		
<b>Project Class:</b>	Capital Renewal		
<b>Project Date:</b>	04/30/2007		
<b>Project Location:</b>	Building-wide: Floor(s) 1, 2, 3, 4, 5		

**Project Description**

The exterior surfaces are stained, detracting from the aesthetic value of this facility. Some areas will need brick pointing, mortar repair, and / or construction joint caulking to restore weather protection. This work is selective, so matching mortar should be applied. Following a detailed examination of the brick and repair of mortar construction joints, the entire building should be pressure washed to remove soil and stains. If moisture is penetrating the masonry facade, it is recommended that a spray sealant be applied directly onto the exterior masonry surface.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035ES02

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Construction joint caulk and backer	LF	750	\$1.14	\$855	\$2.96	\$2,220	\$3,075
Tuck pointing of the building facades	SF	1,000	\$2.25	\$2,250	\$4.57	\$4,570	\$6,820
Damp-proofing / surface sealing	SF	845	\$1.25	\$1,056	\$2.25	\$1,901	\$2,958
Pressure wash with chemical wash	SF	84,515	\$0.15	\$12,677	\$0.45	\$38,032	\$50,709
Man-lift rental	WK	2	\$2,500	\$5,000	\$250	\$500	\$5,500
<b>Project Totals:</b>				<b>\$21,839</b>		<b>\$47,223</b>	<b>\$69,062</b>

<b>Material/Labor Cost</b>		<b>\$69,062</b>
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$68,516</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$13,703
<b>Inflation</b>	+	<u>\$11,123</u>
<b>Construction Cost</b>		<u>\$93,342</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$14,935</u>
<b>Total Project Cost</b>		<u><u><b>\$108,276</b></u></u>

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Description**

<b>Project Number:</b>	0035IS02	<b>Title:</b>	ACOUSTICAL CEILING REPLACEMENT
<b>Priority Sequence:</b>	22		
<b>Priority Class:</b>	4		
<b>Category Code:</b>	IS3B	<b>System:</b>	INTERIOR FINISHES/SYS.
		<b>Component:</b>	CEILINGS
		<b>Element:</b>	REPLACEMENT
<b>Building Code:</b>	0035		
<b>Building Name:</b>	HOFFMAN (KATHERINE B) TEACH LAB		
<b>Subclass/Savings:</b>	Not Applicable		
<b>Code Application:</b>	Not Applicable		
<b>Project Class:</b>	Capital Renewal		
<b>Project Date:</b>	04/30/2007		
<b>Project Location:</b>	Floor-wide: Floor(s) 1,2,3,4,5		

**Project Description**

The ceiling systems throughout the facility are 2 x 2 foot, suspended, acoustical ceiling tiles. The ceilings in this structure are in overall good condition, and most do not currently need to be upgraded. However, there are isolated areas where the ceiling tiles are deteriorated and water-stained. Over the next ten years, almost half of these tiles will need to be replaced. To improve the general appearance of these spaces, it is recommended that the ceilings be upgraded on a low priority basis.

**Specific Project Details**  
**Facility Condition Assessment**  
**Section Three**

**Project Cost**

Project Number: 0035IS02

**Task Cost Estimate**

<b>Task Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Material Unit Cost</b>	<b>Total Material Cost</b>	<b>Labor Unit Cost</b>	<b>Total Labor Cost</b>	<b>Total Cost</b>
Acoustical ceiling system installation	SF	63,492	\$2.76	\$175,238	\$1.40	\$88,889	\$264,127
<b>Project Totals:</b>				<b>\$175,238</b>		<b>\$88,889</b>	<b>\$264,127</b>

<b>Material/Labor Cost</b>		\$264,127
<b>Material Index</b>		97.50
<b>Labor Index</b>		100.00
<b>Material/Labor Indexed Cost</b>		<u>\$259,746</u>
<b>General Contractor Mark Up at 20.0%</b>	+	\$51,949
<b>Inflation</b>	+	<u>\$42,168</u>
<b>Construction Cost</b>		<u>\$353,863</u>
<b>Professional Fees at 16.0%</b>	+	<u>\$56,618</u>
<b>Total Project Cost</b>		<b>\$410,481</b>
<b>Less Backlog Reduction</b>	-	<u>\$205,240</u>
<b>Remaining Cost</b>		<u><u><b>\$205,241</b></u></u>





FACILITY CONDITION ANALYSIS

**SECTION 4**

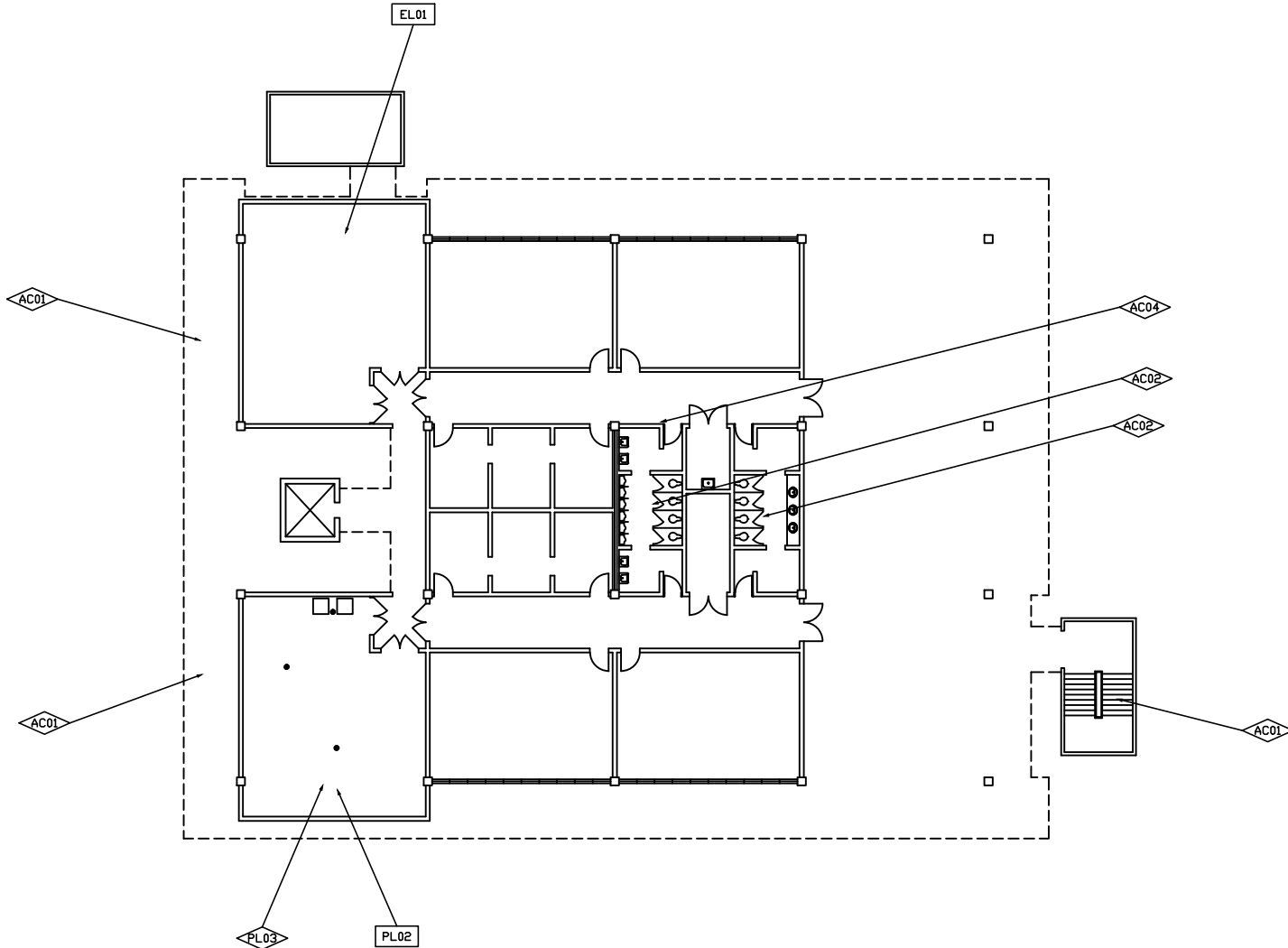
**DRAWINGS  
AND PROJECT LOCATIONS**





FACILITY  
CONDITION  
ASSESSMENT

2165 West Park Court  
Suite N  
Stone Mountain GA 30087  
770.879.7376



PROJECT NUMBER  
APPLIES TO  
ONE ROOM ONLY

PROJECT NUMBER  
APPLIES TO  
ONE ITEM ONLY

PROJECT NUMBER  
APPLIES TO  
ENTIRE BUILDING

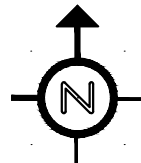
PROJECT NUMBER  
APPLIES TO  
ENTIRE FLOOR

PROJECT NUMBER  
APPLIES TO A SITUATION  
OF UNDEFINED EXTENTS

PROJECT NUMBER  
APPLIES TO AREA  
AS NOTED

ES02

- AC03
- AC05
- EL02
- EL03
- EL04
- FS01
- IS01
- IS02
- PL01
- PL04
- PL05



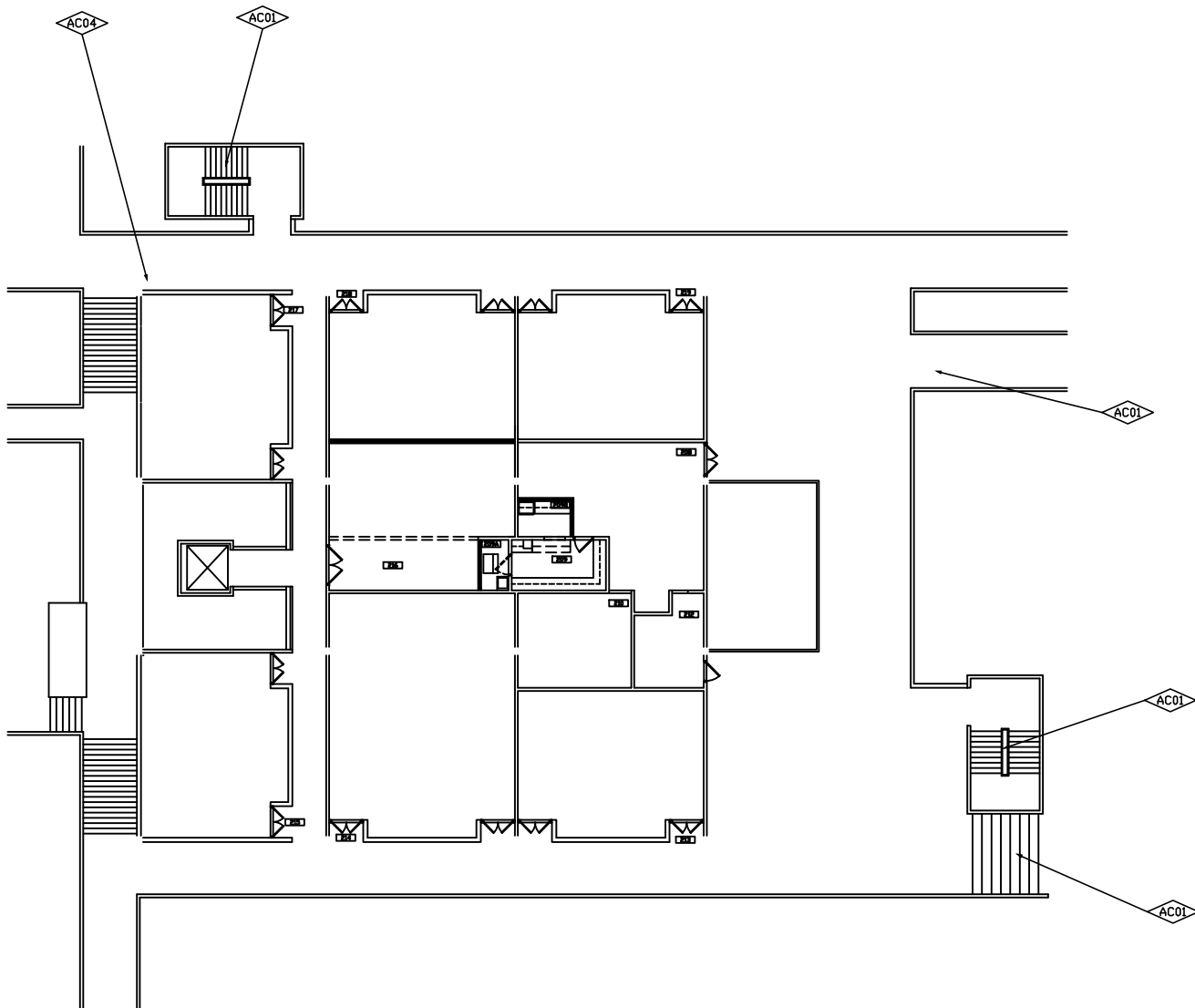
Date: 6/26/2012

Drawn by: J.T.V.

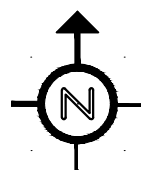
Project No. 12-040

FIRST  
FLOOR  
PLAN

Sheet No.



- AC03   AC05   EL02   EL03   EL04   FS01
- IS01   IS02   IS03   HV01   PL01   PL04
- PL05



HOFFMAN  
(KATHERINE B)  
TEACH LAB  
BLDG NO. 0035

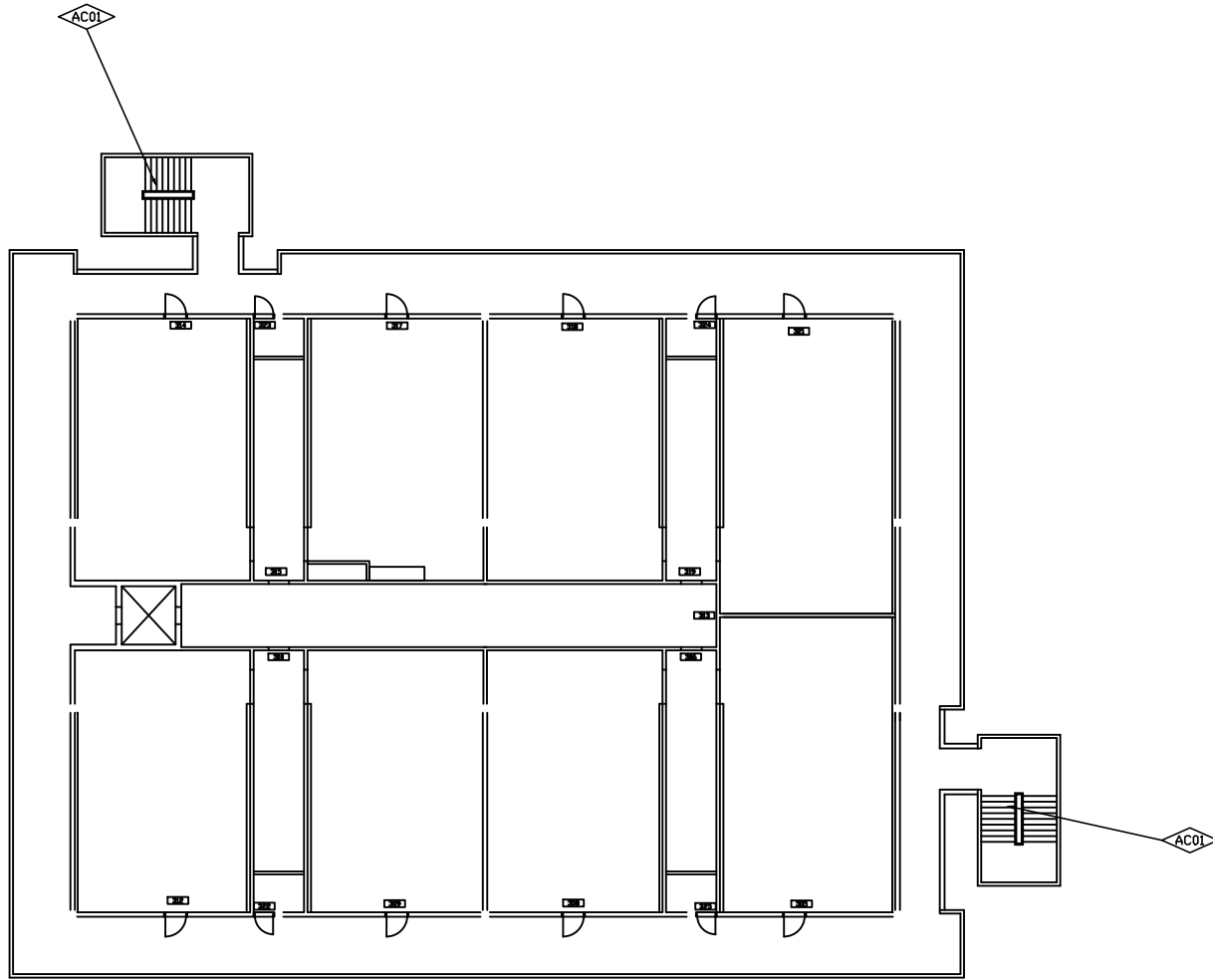


FACILITY  
CONDITION  
ASSESSMENT  
2165 West Park Court  
Suite N  
Stone Mountain GA 30087  
770.879.7376

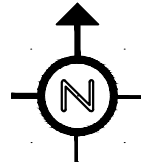
- PROJECT NUMBER APPLIES TO ONE ROOM ONLY
- PROJECT NUMBER APPLIES TO ONE ITEM ONLY
- PROJECT NUMBER APPLIES TO ENTIRE BUILDING
- PROJECT NUMBER APPLIES TO ENTIRE FLOOR
- PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS
- PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 6/26/2012  
Drawn by: J.T.V.  
Project No. 12-040

SECOND  
FLOOR  
PLAN



- AC03
- AC05
- EL02
- EL04
- FS01
- IS01
- IS02
- IS03
- PL01
- PL04
- PL05



HOFFMAN  
(KATHERINE B)  
TEACH LAB

BLDG NO. 0035



FACILITY  
CONDITION  
ASSESSMENT

2165 West Park Court  
Suite N  
Stone Mountain GA 30087  
770.879.7376

PROJECT NUMBER  
APPLIES TO  
ONE ROOM ONLY

PROJECT NUMBER  
APPLIES TO  
ONE ITEM ONLY

PROJECT NUMBER  
APPLIES TO  
ENTIRE BUILDING

PROJECT NUMBER  
APPLIES TO  
ENTIRE FLOOR

PROJECT NUMBER  
APPLIES TO A SITUATION  
OF UNDEFINED EXTENTS

PROJECT NUMBER  
APPLIES TO AREA  
AS NOTED

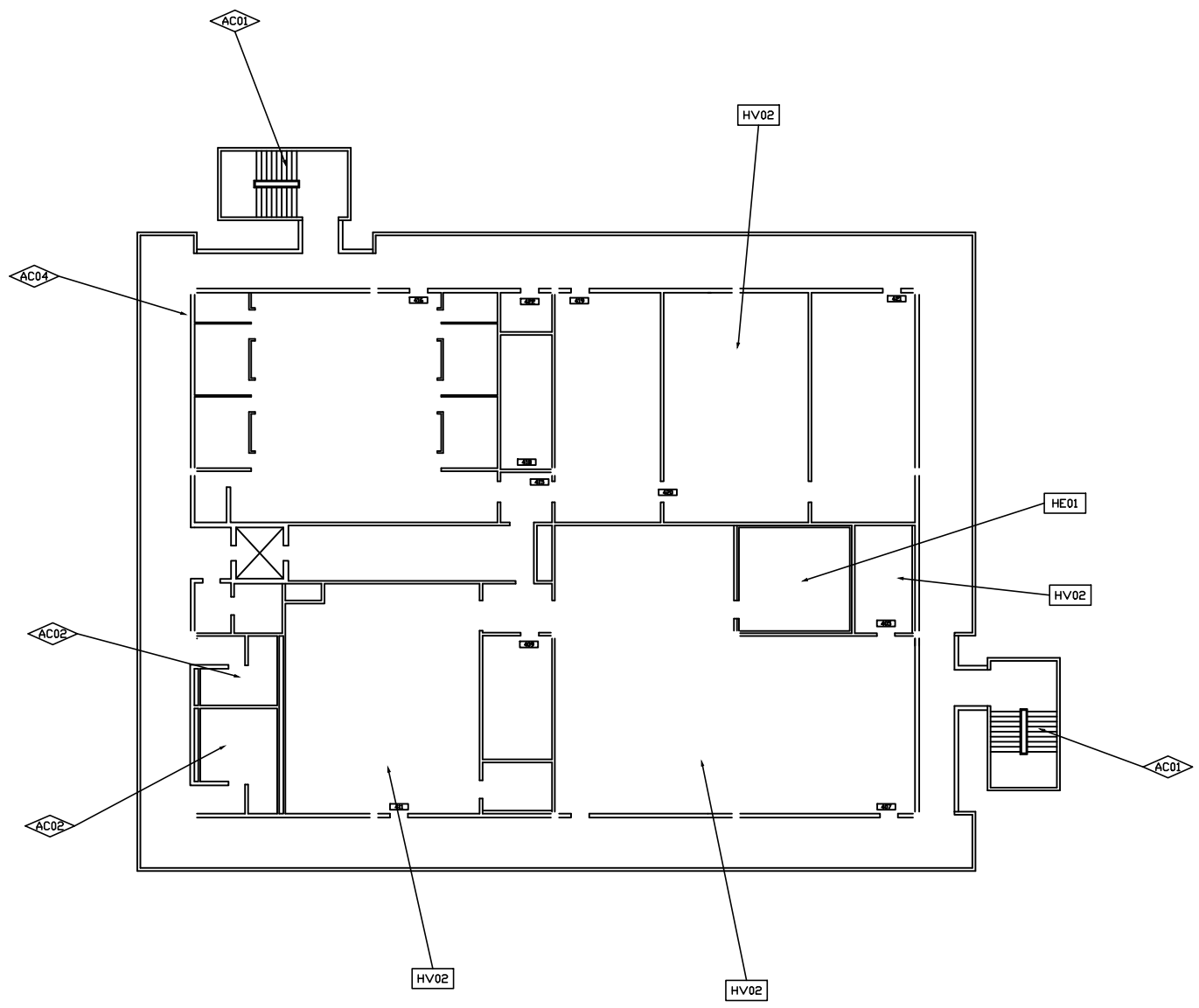
Date: 6/26/2012

Drawn by: J.T.V.

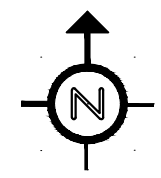
Project No. 12-040

THIRD  
FLOOR  
PLAN







Sheet No.



- |      |      |      |      |      |      |
|------|------|------|------|------|------|
| AC03 | AC05 | EL02 | EL04 | FS01 | IS01 |
| IS02 | IS03 | HV01 | PL01 | PL04 | PL05 |



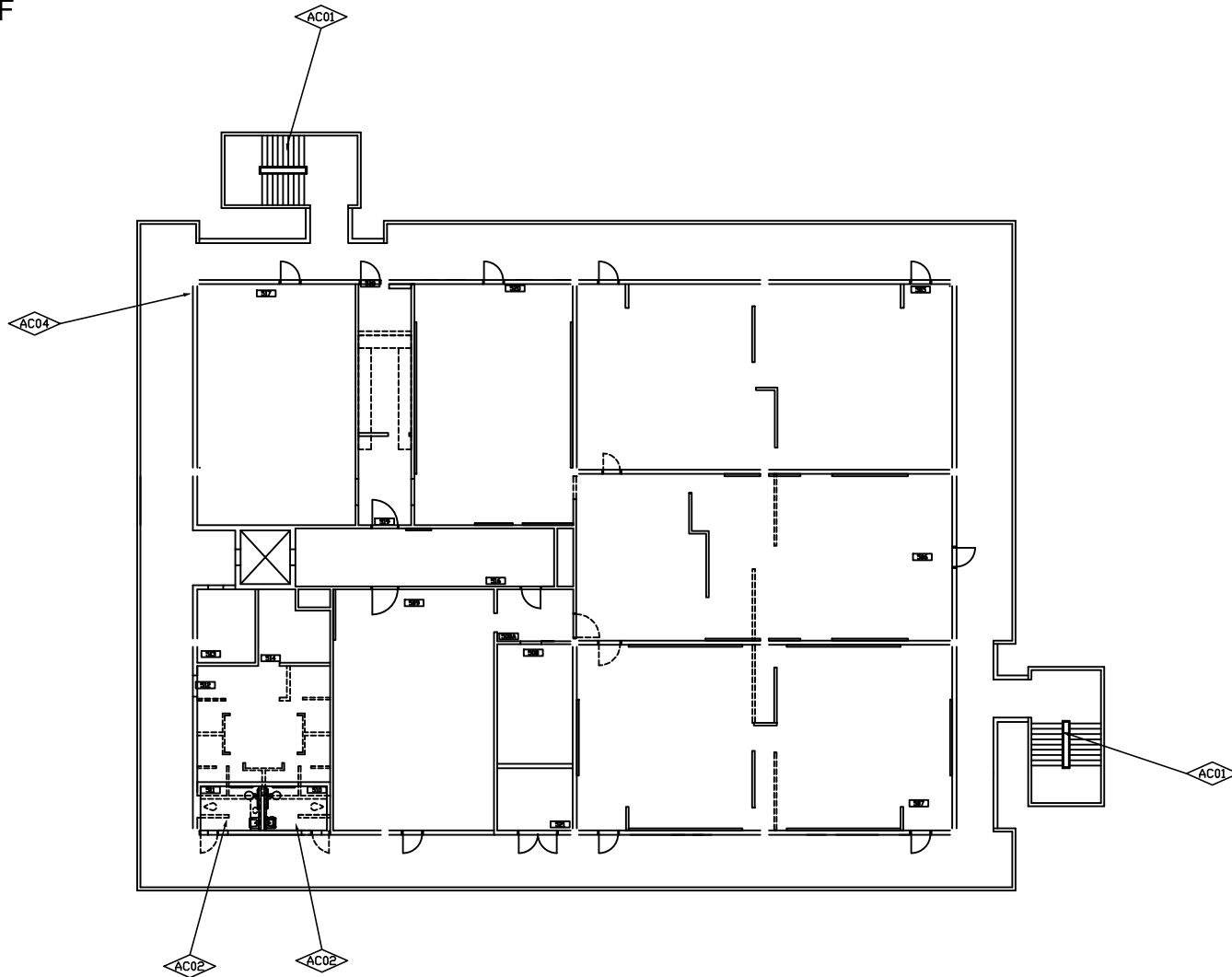
FACILITY  
CONDITION  
ASSESSMENT  
2165 West Park Court  
Suite N  
Stone Mountain GA 30087  
770.879.7376

-  PROJECT NUMBER APPLIES TO ONE ROOM ONLY
-  PROJECT NUMBER APPLIES TO ONE ITEM ONLY
-  PROJECT NUMBER APPLIES TO ENTIRE BUILDING
-  PROJECT NUMBER APPLIES TO ENTIRE FLOOR
-  PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS
-  PROJECT NUMBER APPLIES TO AREA AS NOTED

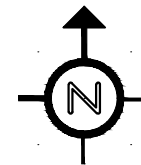
Date: 7/10/2012  
Drawn by: J.T.V.  
Project No. 12-040

## FOURTH FLOOR PLAN

ROOF  
HV01



- AC03
- AC05
- EL02
- EL04
- FS01
- IS01
- IS02
- IS03
- PL01
- PL04
- PL05



HOFFMAN  
(KATHERINE B)  
TEACH LAB

BLDG NO. 0035



FACILITY  
CONDITION  
ASSESSMENT

2165 West Park Court  
Suite N  
Stone Mountain GA 30087  
770.879.7376

PROJECT NUMBER APPLIES TO ONE ROOM ONLY

PROJECT NUMBER APPLIES TO ONE ITEM ONLY

PROJECT NUMBER APPLIES TO ENTIRE BUILDING

PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS

PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 6/26/2012

Drawn by: J.T.V.

Project No. 12-040

FIFTH  
FLOOR  
PLAN

Sheet No.

5 of 5





FACILITY CONDITION ANALYSIS

**SECTION 5**

LIFE CYCLE MODEL SUMMARY  
AND PROJECTIONS



**Life Cycle Model  
Building Component Summary**

**0035 : HOFFMAN (KATHERINE B) TEACH LAB**

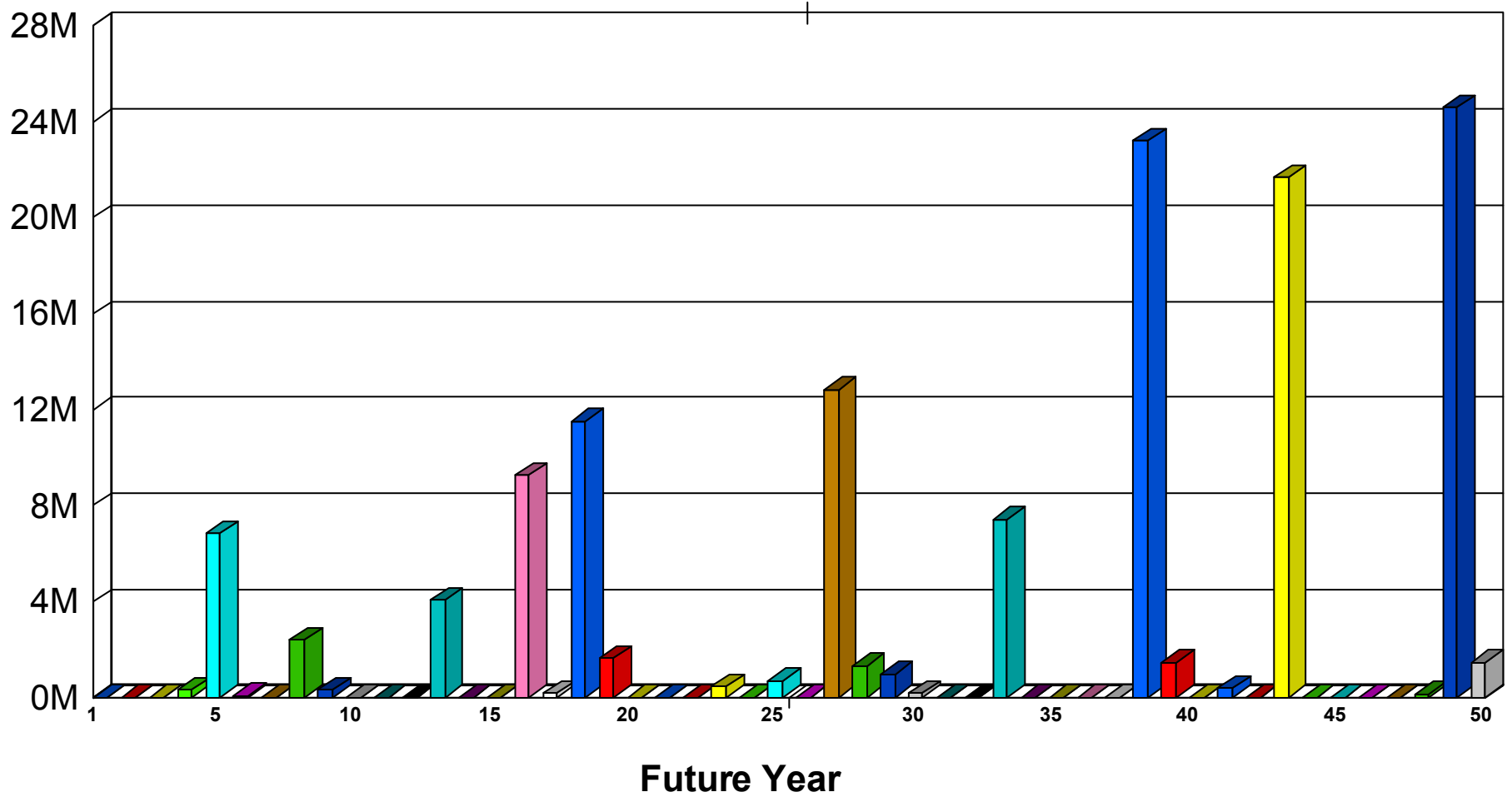
Uniformat Code	Component Description	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp
B2030	EXTERIOR METAL DOORS, INCL. HARDWARE	60	EA	\$4,174.03		\$250,442	1990	30
B3010	BUILT-UP ROOF	21,064	SF	\$9.48		\$199,597	2010	20
C3010	INTERIOR FINISH - LABORATORY	79,365	SF	\$72.72		\$5,771,661	2005	11
D1010	ELEVATOR CAB RENOVATION - PASSENGER	1	EA	\$42,077.50		\$42,078	2004	12
D1010	ELEVATOR HATCH AND LANDING RENOVATION	5	EA	\$16,109.02		\$80,545	2004	12
D1010	UNDER 4,000 LBS. CAP. ELEVATOR MACHINE - HYDRAULIC	1	EA	\$35,737.67		\$35,738	2004	25
D1010	ELEVATOR JACK REPLACEMENT - HYDRAULIC	1	EA	\$46,567.27		\$46,567	2004	25
D2010	PLUMBING FIXTURES - LABORATORY	79,365	SF	\$9.02		\$716,264	1995	35
D2020	WATER / PROCESS PIPING - LABORATORY	79,365	SF	\$7.39		\$586,629	1969	35
D2020	WATER HEATER, SHELL-AND-TUBE HEAT EXCHANGER	140	GPM	\$492.09		\$68,892	1969	24
D2030	DRAIN PIPING - LABORATORY	79,365	SF	\$11.08		\$879,568	1969	40
D2050	AIR COMPRESSOR PACKAGE (AVERAGE SIZE)	1	SYS	\$6,283.42		\$6,283	1969	25
D2050	MED / LAB AIR COMPRESSOR SYS., INC. DRYER	5	HP	\$5,856.08		\$29,280	1969	20
D2050	MED / LAB VACUUM PUMP SYSTEM	20	HP	\$1,592.59		\$31,852	2004	20
D3040	CONDENSATE RECEIVER	1	SYS	\$11,769.14		\$11,769	1969	15
D3040	FUME HOOD, INCLUDING MECH. SYS	55	SYS	\$34,908.75		\$1,919,981	2004	20
D3040	FUME HOOD, INCLUDING MECH. SYS	13	SYS	\$34,908.75		\$453,814	1969	20
D3040	HVAC SYSTEM - LABORATORY	71,865	SF	\$83.42		\$5,995,279	2004	25
D3040	HVAC SYSTEM - LABORATORY	4,000	SF	\$83.42		\$333,697	2011	25
D3040	HVAC SYSTEM - LABORATORY	3,500	SF	\$83.42		\$291,985	1990	25
D3040	BASE MTD. PUMP - UP TO 15 HP	10	HP	\$2,109.18		\$21,092	2004	20
D3040	BASE MTD. PUMP - 15 HP TO 50 HP	50	HP	\$1,057.57		\$52,879	2004	20
D5010	ELECTRICAL SYSTEM - LABORATORY	79,365	SF	\$20.88		\$1,657,333	1969	50
D5010	ELECTRICAL SWITCHGEAR 120/208 V	1,200	AMP	\$40.77		\$48,929	1969	20
D5010	ELECTRICAL SWITCHGEAR 277/480 V	2,500	AMP	\$48.93		\$122,333	1969	20
D5010	TRANSFORMER, DRY, 480-208 V (OVER 150 KVA)	500	KVA	\$53.07		\$26,536	1969	30
D5020	EXIT SIGNS (CENTRAL POWER)	80	EA	\$269.01		\$21,521	2004	20
D5020	EXTERIOR LIGHT (HID)	9	EA	\$1,114.17		\$10,027	1990	20
D5020	LIGHTING - LABORATORY	79,365	SF	\$8.88		\$704,752	2004	20
D5030	FIRE ALARM SYSTEM	79,365	SF	\$3.00		\$238,098	2004	15
D5040	GENERATOR, DIESEL (UP TO 50 KW)	10	KW	\$1,189.87	0.30	\$3,570	1969	25
F1050	ELEVATOR CONTROLLER - HYDRAULIC	1	EA	\$28,608.19		\$28,608	2004	20

Life Cycle Model  
Building Component Summary  
0035 : HOFFMAN (KATHERINE B) TEACH LAB

Uniformat Code	Component Description	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp
						<b>\$20,687,599</b>		

# Life Cycle Model Expenditure Projections

0035 : HOFFMAN (KATHERINE B) TEACH LAB



Average Annual Renewal Cost per SqFt \$13.95



FACILITY CONDITION ANALYSIS

**SECTION 6**

PHOTOGRAPHIC LOG





Photo Log - Facility Condition Assessment  
0035 : HOFFMAN (KATHERINE B) TEACH LAB

Photo ID No.	Description	Location	Date
0035001a	Exterior facade	West side of building	04/30/2007
0035001e	Rusting utility fan sets	Roof	04/30/2007
0035002a	Lower level loading dock	West side of building	04/30/2007
0035002e	Fan-powered ventilator is timeworn	Roof	04/30/2007
0035003a	Exterior stairs	West side of building	04/30/2007
0035003e	Another rusting utility fan	Roof	04/30/2007
0035004a	Exterior facade	South side of building	04/30/2007
0035004e	Void	Void	04/30/2007
0035005a	Stained exterior facade	East side of building	04/30/2007
0035005e	Semco rooftop air handler	Roof	04/30/2007
0035006a	Stained exterior facade	East side of building	04/30/2007
0035006e	Exhaust fans are in good condition	Roof	04/30/2007
0035007a	Handicapped access ramp	North side of building	04/30/2007
0035007e	Semco rooftop air handler	Roof	04/30/2007
0035008a	Building nameplate	East side of building	04/30/2007
0035008e	Another rusting utility fan	Roof	04/30/2007
0035009a	Courtyard area	North side of building	04/30/2007
0035009e	Another timeworn powered ventilator	Roof	04/30/2007
0035010a	Stained facade	North side of building	04/30/2007
0035010e	Another timeworn powered ventilator	Roof	04/30/2007
0035011a	Landscape and walks	North side of building	04/30/2007
0035011e	Air Sentry fume hood	Room 517	04/30/2007
0035012a	Parking area	Northwest side of building	04/30/2007
0035012e	Original GE power panels	Room 516	04/30/2007
0035013a	ADA-compliant elevator controls	Elevator cab	04/30/2007
0035013e	Deteriorating fume hood	Room 405	04/30/2007
0035014a	Roofing material	Rooftop	04/30/2007
0035014e	Evaporator unit for cold box is past its life cycle	Room 406	04/30/2007
0035015a	Roofing material	Rooftop	04/30/2007
0035015e	Older vintage fume hoods	Room 411	04/30/2007
0035016a	Lightning arrestor	Rooftop	04/30/2007
0035016e	Aged lavatory and non-GFCI receptacle	Fourth floor, women's room	04/30/2007

Photo Log - Facility Condition Assessment  
0035 : HOFFMAN (KATHERINE B) TEACH LAB

Photo ID No.	Description	Location	Date
0035017a	Roofing material and drainage	Rooftop	04/30/2007
0035017e	Exterior light fixture missing internal parts	Second floor, exterior overhang	04/30/2007
0035018a	Non-ADA-compliant handrails	North stair tower	04/30/2007
0035018e	Exterior incandescent light fixture	Second floor, exterior overhang	04/30/2007
0035019a	Guardrails	North perimeter walk	04/30/2007
0035019e	Low-grade laundry sink without vacuum breaker	Room 209A	04/30/2007
0035020a	Single-level drinking fountain	Fifth floor	04/30/2007
0035020e	Old, worn receptacle	Second floor	04/30/2007
0035021a	Stained concrete ceiling and door hardware	Fifth floor	04/30/2007
0035021e	Original 10 kW generator	Main mechanical room	04/30/2007
0035022a	Men's restroom door and signage	Room 511	04/30/2007
0035022e	Main switchgear is original	Main mechanical room	04/30/2007
0035023a	Men's restroom fixtures	Room 511	04/30/2007
0035023e	Control and house air compressors	Main mechanical room	04/30/2007
0035024a	Women's restroom door and signage	Room 510	04/30/2007
0035024e	Motor control center and condensate receiver	Main mechanical room	04/30/2007
0035025a	Women's restroom fixtures	Room 510	04/30/2007
0035025e	HVAC pumps	Main mechanical room	04/30/2007
0035026a	Deteriorated laboratory materials	Room 509	04/30/2007
0035026e	Heat exchanger is in good condition	Main mechanical room	04/30/2007
0035027a	Newer laboratory materials	Rooms 506, 507	04/30/2007
0035027e	Vacuum pump	Main mechanical room	04/30/2007
0035028a	Newer laboratory materials	Rooms 506, 507	04/30/2007
0035028e	Original domestic water heater	Main mechanical room	04/30/2007
0035029a	Newer laboratory materials	Rooms 506, 507	04/30/2007
0035029e	Service entrance transformer	North exterior	05/10/2012
0035030a	Stained ceiling tile	Room 506	04/30/2007
0035030e	Original gong fire alarm device	Fifth floor, exterior walkway	05/10/2012
0035031a	Stained ceiling tile	Room 505	04/30/2007
0035031e	Discolored exterior lighting fixtures	Fifth floor, exterior walkway	05/10/2012
0035032a	Deteriorated laboratory materials	Room 517	04/30/2007
0035032e	Original audible annunciator	Fifth floor, exterior walkway	05/10/2012
0035033a	Guardrails	Fifth floor	04/30/2007

Photo Log - Facility Condition Assessment  
0035 : HOFFMAN (KATHERINE B) TEACH LAB

Photo ID No.	Description	Location	Date
0035033e	Typical rooftop air handler and fume hood exhaust fans	West roof	05/10/2012
0035034a	Stair handrails	Fifth floor	04/30/2007
0035034e	Strobic exhaust fans	Southeast roof	05/10/2012
0035035a	Guardrails	Fourth floor	04/30/2007
0035035e	Variable frequency drives	Fifth floor, mechanical room	05/10/2012
0035036a	Door hardware and signage	Room 407	04/30/2007
0035036e	2004 vintage VAV air handling unit AHU5-1	Mechanical room 512	05/10/2012
0035037a	Deteriorated laboratory cabinets and floor tile	Room 407	04/30/2007
0035037e	Hot water reheat VAV box	Mechanical room 512	05/10/2012
0035038a	Floor tiles	Room 407	04/30/2007
0035038e	Updated fume hood	Lab 507	05/10/2012
0035039a	Deteriorated and mismatched floor tiles	Room 411	04/30/2007
0035039e	Original fume hood	Lab 415	05/10/2012
0035040a	Men's restroom door and signage	Room 412	04/30/2007
0035040e	Original GE breaker panels	Fourth floor, lab	05/10/2012
0035041a	Men's restroom water closet	Room 412	04/30/2007
0035041e	Damaged light fixture	Lab 407	05/10/2012
0035042a	Men's restroom urinal	Room 412	04/30/2007
0035042e	Typical lab lighting	Lab 407	05/10/2012
0035043a	Men's restroom sinks and faucets	Room 412	04/30/2007
0035043e	Outdated fume hood with ACM backsplash	Lab 407	05/10/2012
0035044a	Women's restroom door and signage	Room 413	04/30/2007
0035044e	Original environmental cooler	Lab 407	05/10/2012
0035045a	Women's restroom water closet	Room 413	04/30/2007
0035045e	Carrier air handler	Mechanical room 414B	05/10/2012
0035046a	Women's restroom sinks and faucets	Room 413	04/30/2007
0035046e	1993 Air handling unit	Mechanical room 422	05/10/2012
0035047a	Perimeter walkway materials	Fourth floor	04/30/2007
0035047e	Battery back-up LED exit sign	Third floor	05/10/2012
0035048a	Damaged exterior wall	Fourth floor	04/30/2007
0035048e	Heat exchanger HEX1 and hot water pumps	Mechanical room 106	05/10/2012
0035049a	Door hardware and signage	Room 305	04/30/2007
0035049e	Chilled water pumps	Mechanical room 106	05/10/2012

Photo Log - Facility Condition Assessment  
0035 : HOFFMAN (KATHERINE B) TEACH LAB

Photo ID No.	Description	Location	Date
0035050a	Deteriorated laboratory materials	Room 305	04/30/2007
0035050e	Rusting condensate return unit	Mechanical room 106	05/10/2012
0035051a	Stained ceiling tile	Room 305	04/30/2007
0035051e	Domestic hot water heat exchanger and storage unit	Mechanical room 106	05/10/2012
0035052a	Deteriorated laboratory materials	Rooms 309, 310, 312	04/30/2007
0035052e	Simplex addressable fire alarm panel	Mechanical room 111	05/10/2012
0035053a	Perimeter walk	Third floor	04/30/2007
0035053e	Hydraulic elevator machine	Elevator room 112	05/10/2012
0035054a	Single-level drinking fountain	Third floor	04/30/2007
0035054e	Original substation	Electrical room 111	05/10/2012
0035055a	Concrete half-walls	Second floor	04/30/2007
0035055e	Undersized natural gas emergency generator	Electrical room 111	05/10/2012
0035056a	Metal guardrails	Room	04/30/2007
0035056e	Zenith automatic transfer switch	Electrical room 111	05/10/2012
0035057a	Newer classroom materials	Room 217	04/30/2007
0035058a	Room signage	Room 218	04/30/2007
0035059a	Newer classroom materials	Room 218	04/30/2007
0035060a	Metal guardrails	Second floor	04/30/2007
0035061a	General office materials	Room 208	04/30/2007
0035062a	Exterior handrails	Southeast stair tower	04/30/2007
0035063a	Automatic door opener	West entrance	04/30/2007
0035064a	Door hardware and signage	Room 127	04/30/2007
0035065a	Men's restroom door and signage	Room 211	04/30/2007
0035066a	Men's restroom water closet	Room 211	04/30/2007
0035067a	Men's restroom urinal	Room 211	04/30/2007
0035068a	Men's restroom sinks and faucets	Room 211	04/30/2007
0035069a	Women's restroom door and signage	Room 117	04/30/2007
0035070a	Women's restroom water closet	Room 117	04/30/2007
0035071a	Women's restroom water closet partitions	Room 117	04/30/2007
0035072a	Men's restroom sinks and faucets	Room 121a	04/30/2007
0035073a	Men's handicapped-accessible restroom fixtures	Room 121a	04/30/2007
0035074a	Women's handicapped-accessible restroom	Room 117a	04/30/2007

Photo Log - Facility Condition Assessment  
0035 : HOFFMAN (KATHERINE B) TEACH LAB

Photo ID No.	Description	Location	Date
0035075a	Women's handicapped-accessible restroom fixtures	Room 117a	04/30/2007
0035076a	Women's handicapped-accessible restroom fixtures	Room 117a	04/30/2007
0035077a	Handrails	Southwest exterior	05/10/2012
0035078a	Handrails	Northwest exterior	05/10/2012
0035079a	Handrails	Northwest, stairwell	05/10/2012
0035080a	Handrails	Southeast, steps, second level	05/10/2012
0035081a	Women's restroom	First floor	05/10/2012
0035082a	Men's restroom entrance	Fourth floor	05/10/2012
0035083a	Drinking fountain	Second floor, northwest	05/10/2012
0035084a	Painted wood doors with knob hardware	Fifth floor	05/10/2012
0035085a	Old vinyl tile flooring	Room 405	05/10/2012

Facility Condition Analysis - Photo Log



0035001A.jpg



0035001E.jpg



0035002A.jpg



0035002E.jpg



0035003A.jpg



0035003E.jpg



0035004A.jpg



0035004E.jpg



0035005A.jpg



0035005E.jpg



0035006A.jpg



0035006E.jpg



0035007A.jpg



0035007E.jpg



0035008A.jpg



0035008E.jpg



0035009A.jpg



0035009E.jpg



0035010A.jpg



0035010E.jpg

Facility Condition Analysis - Photo Log



0035011A.jpg



0035011E.jpg



0035012A.jpg



0035012E.jpg



0035013A.jpg



0035013E.jpg



0035014A.jpg



0035014E.jpg



0035015A.jpg



0035015E.jpg



0035016A.jpg



0035016E.jpg



0035017A.jpg



0035017E.jpg



0035018A.jpg



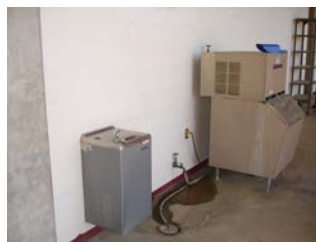
0035018E.jpg



0035019A.jpg



0035019E.jpg



0035020A.jpg



0035020E.jpg

Facility Condition Analysis - Photo Log



0035021A.jpg



0035021E.jpg



0035022A.jpg



0035022E.jpg



0035023A.jpg



0035023E.jpg



0035024A.jpg



0035024E.jpg



0035025A.jpg



0035025E.jpg



0035026A.jpg



0035026E.jpg



0035027A.jpg



0035027E.jpg



0035028A.jpg



0035028E.jpg



0035029A.jpg



0035029e.jpg



0035030A.jpg



0035030e.jpg



Facility Condition Analysis - Photo Log



0035031A.jpg



0035031e.jpg



0035032A.jpg



0035032e.jpg



0035033A.jpg



0035033e.jpg



0035034A.jpg



0035034e.jpg



0035035A.jpg



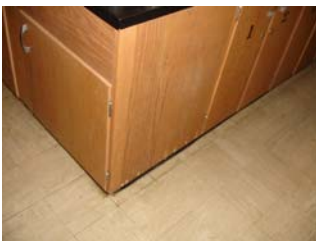
0035035e.jpg



0035036A.jpg



0035036e.jpg



0035037A.jpg



0035037e.jpg



0035038A.jpg



0035038e.jpg



0035039A.jpg



0035039e.jpg



0035040A.jpg

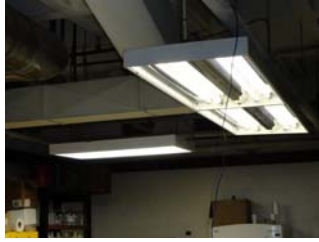


0035040e.jpg

Facility Condition Analysis - Photo Log



0035041A.jpg



0035041e.jpg



0035042A.jpg



0035042e.jpg



0035043A.jpg



0035043e.jpg



0035044A.jpg



0035044e.jpg



0035045A.jpg



0035045e.jpg



0035046A.jpg



0035046e.jpg



0035047A.jpg



0035047e.jpg



0035048A.jpg



0035048e.jpg



0035049A.jpg



0035049e.jpg



0035050A.jpg



0035050e.jpg

Facility Condition Analysis - Photo Log



0035051A.jpg



0035051e.jpg



0035052A.jpg



0035052e.jpg



0035053A.jpg



0035053e.jpg



0035054A.jpg



0035054e.jpg



0035055A.jpg



0035055e.jpg



0035056A.jpg



0035056e.jpg



0035057A.jpg



0035058A.jpg



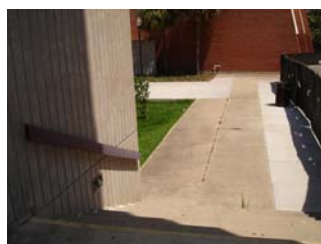
0035059A.jpg



0035060A.jpg



0035061A.jpg



0035062A.jpg



0035063A.jpg



0035064A.jpg

Facility Condition Analysis - Photo Log



0035065A.jpg



0035066A.jpg



0035067A.jpg



0035068A.jpg



0035069A.jpg



0035070A.jpg



0035071A.jpg



0035072A.jpg



0035073A.jpg



0035074A.jpg



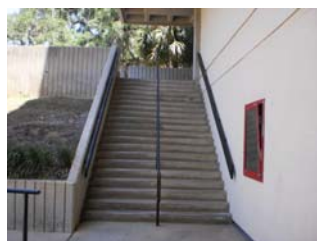
0035075A.jpg



0035076A.jpg



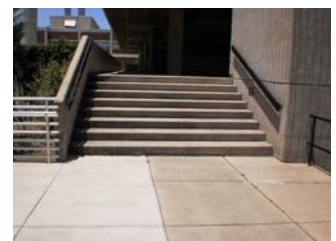
0035077a.jpg



0035078a.jpg



0035079a.jpg



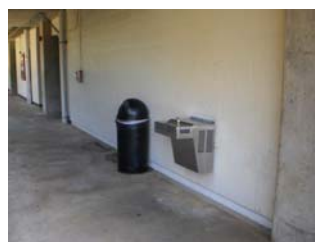
0035080a.jpg



0035081a.jpg



0035082a.jpg



0035083a.jpg



0035084a.jpg

Facility Condition Analysis - Photo Log



0035085a.jpg

